امتحانات رقم (1)

الترم الاول

1 **Cairo Governorate**

1. Choose the correct answer :

1. Which display makes it easier to see the median ?

 A. Histogram **B.** Box plot **C.** Dot plot **D.** Bar graph

2. The minimum of the set of data 20 , 12 , 18 , 19 and 17 is _____

 A. 12 **B.** 18 **C.** 19 **D.** 20

3. The range of the values : 5 , 9 , 10 , 7 and 4 is _____

 A. 5 **B.** 6 **C.** 7 **D.** 10

4. The mode of the values : 8 , 9 , 7 , 8 , 6 , 7 and 8 is _____

 A. 9 **B.** 8 **C.** 7 **D.** 6

5. The balanced point of the set of data which represented by the opposite dot plot is _____

 A. 5 **B.** 4

 C. 3 **D.** 2

6. Which of the following are like terms ?

 A. $3x$ and $3y$ **B.** $2x$ and x^2 **C.** $3x$ and $2x$ **D.** x^2 and y^2

7. All of the following are solutions of the inequality $x < -3$ except _____

 A. -7 **B.** -11 **C.** -1 **D.** -4

2. Complete each of the following :

1. $7 \times (\underline{\quad} + \underline{\quad}) = 14 + 21$

2. $\dfrac{5}{6} - \dfrac{3}{8} = \underline{\quad}$

3. $|-9| - |8| = \underline{\quad}$

4. If we add three times a number to 10 , we get the expression _____

5. The value of the expression : $23 - 2x$ at $x = 5$ equals _____

6. The inequality that represented by the opposite number line is _____

7. If the mean of the values : 3 , 7 , 4 , 6 and x is 5, then $x = \underline{\quad}$

8. The median of the set of values : 15 , 20 , 35 , 18 and 43 is _____

3. Choose the correct answer :

1. The L.C.M of 8 and 6 is _____

 A. 12 **B.** 16 **C.** 24 **D.** 48

2. $3\frac{1}{2} + 2\frac{1}{4} = $ _____

   A. $5\frac{1}{2}$
   B. $5\frac{3}{4}$
   C. $5\frac{1}{4}$
   D. $5\frac{3}{8}$

3. The greatest negative integer is _____

   A. -2
   B. -1
   C. 4
   D. $-(-3)$

4. All the following numbers are rational numbers except _____

   A. 1
   B. $\frac{2}{3}$
   C. $\frac{7}{4-4}$
   D. $\frac{4-4}{7}$

5. Which of the following is an algebraic expression ?

   A. $18 - 2 \times 5$
   B. $5 + 7 - 2$
   C. $3x + y$
   D. $3(2 + 8)$

6. If $3x = 6$, then $x = $ _____

   A. 2
   B. 3
   C. -3
   D. -2

7. In the equation : $y = x - 1$, if $x = 5$, then $y = $ _____

   A. -4
   B. 4
   C. 6
   D. -6

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4. **Answer the following questions :**

1. ✳ Amr wanted to distribute 104 kg of apple among 4 boxes.
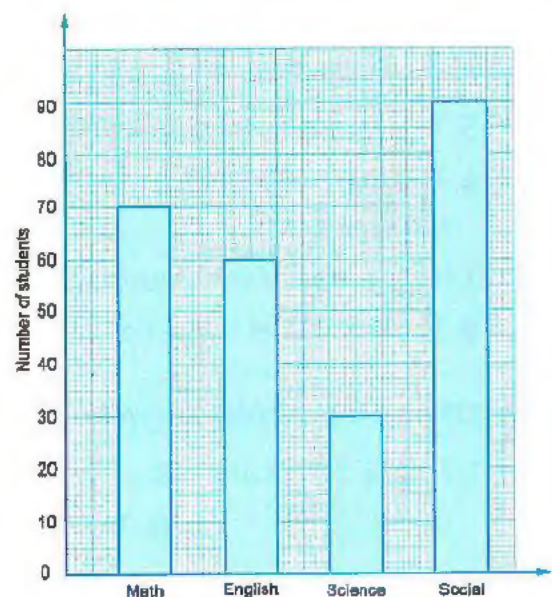
   Is it possible ? and why ?

   _____

   _____

2. Evaluate the algebraic expression : $5^2 + 4(a^2 - 1)$, at $a = 4$

   _____

   _____

3. Solve the equation : $x + 1 = -3$

   _____

   _____

4. From the opposite bar graph answer the following questions :

   a. How many students passed in math quiz ?

   _____

   b. How many subjects have at least 60 students passed the quiz ?

   _____

2	Cairo Governorate		El Shrouk Educational Zone Mathematics Supervision

1. Choose the correct answer :

1. The least common multiple (L.C.M) of 3 and 6 is _____

    A. 3   **B.** 6   **C.** 18   **D.** 36

2. The set of integers _____ the set of rational numbers.

    A. belongs to   **B.** doesn't belong to

    C. is a subset of   **D.** isn't a subset of

3. The _____ = the greatest value − the smallest value.

    A. range   **B.** mean   **C.** median   **D.** mode

4. All of the following represents numerical data except the _____

    A. temperature.   **B.** height.   **C.** weight.   **D.** favourite color.

5. If $x = |-8|$, then $x =$ _____

    A. − 8   **B.** 8   **C.** 10   **D.** − 10

6. _____ is one of the solutions of $x < 2$ in the set of natural numbers.

    A. 1   **B.** − 1   **C.** − 2   **D.** − 3

7. The algebraic expression that represents "Add y to the number 5" is _____

    A. $y - 5$ **B.** $y + 5$ **C.** $y \times 5$ **D.** $y \div 5$

2. Complete the following :

1. The number _____ is just located at the right of − 7 on the number line.

2. The mode of the values : 5 , 3 , 5 and 4 is _____

3. The value of x in the equation : $x - 4 = 20$ is _____

4. The number whose prime factors are 2 , 3 and 5 is _____

5. The mean of the values : 7 , 3 , 6 and 4 is _____

6. The value of the expression : $3x - 5$, when $x = 2$ is _____

7. The value of the variable x that satisfies the inequality : $x < 1$ in the set of natural numbers is _____

8. ＊ All the _____ numbers are divisible by 2

3. Choose the correct answer :

1. Zero is _____ number.

    A. positive   **B.** negative

    C. neither positive nor negative   **D.** prime

2. In the expression : $5x + 10$, the coefficient is _____

  A. 1   **B.** 5   **C.** 10   **D.** 15

3. The greatest common factor (G.C.F) of 3 and 6 is _____

  A. 2   **B.** 3   **C.** 4   **D.** 9

4. The number of terms of the expression : $3x - 2$ is _____

  A. 2   **B.** 3   **C.** 4   **D.** 5

5. In the following data set : 1 , 2 , 4 and 13 , the outlier is _____

  A. 1   **B.** 2   **C.** 3   **D.** 13

6. The range of the values : 3 , 5 , 9 and 2 is _____

  A. 7   **B.** 9   **C.** 11   **D.** 14

7. The _____ is from the categorical data.

  A. height   **B.** favourite color   **C.** sleeping hours   **D.** age

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4. **Answer the following questions :**

1. Use the equation : $y = 3x$ to answer the following questions :

  a. The dependent variable is _____ , and the independent variable is _____

  b. The value of y when $x = 2$ is _____

2. * From the following numbers : 320 , 510 , 324 , 306 , 500 , 205 and 161

  a. The numbers which divisible by 6 are _____

  b. The numbers which divisible by 10 are _____

3. In the algebraic expression : $4x + 5$,

  a. The constant is _____

  b. The coefficient is _____

4. Use the opposite box plot to complete the following :

  a. The median is _____

  b. The lower quartile is _____

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3   **Giza Governorate**   **Omrania Educational Zone**
Maths Inspection

1. **Choose the correct answer :**

1. $3\frac{1}{5} + 1\frac{3}{5} =$ _____

  A. $4\frac{4}{5}$ **B.** $2\frac{2}{5}$ **C.** $\frac{4}{5}$ **D.** 1

2. "A number is no less than 7" is written as _____

  A. $n \le 7$ **B.** $n \ge 7$ **C.** $n < 7$ **D.** $n > 7$

3. Seven cubed added to 5 = _____

  A. $7^2 + 5$ **B.** $7^3 + 5$ **C.** $2^7 + 5$ **D.** $7 \times 2 \times 5$

4. ✻ From the opposite table :

The range = ————

min	Q1	median	Q3	max
60	75	95	105	120

   A. 60   B. 75   C. 95   D. 105

5. ———— is lying between -1.4 and -0.9

   A. -0.7 B. -1.3 C. -1.6 D. -0.90

6. If $8m = 0$, then $100m = $ ————

   A. 8   B. 100   C. 0   D. 800

7. $18 + 9 = 9 ($ ——— $+$ ——— $)$

   A. 2 , 3   B. 9 , 1   C. 2 , 1   D. 2 , 7

2. Complete the following :

1. The greatest number of 0.1 , 0.01 , 0.7 and 2.1 is ————

2. The age of Mona now is x years , then her age 3 years ago was ————

3. If the median of the values : $K+1$, $K+2$, $K+3$, $K+4$, $K+5$ is 13 , then $K = $ ————

4. $2\frac{1}{9} + 2\frac{8}{9} = $ ————

5. "8 increased by L equals Q" in equation is ————

6. The median for the set of values : 15 , 15 , 17 , 18 , 19 , 21 , 22 , 22 and 23 is ————

7. If $k + 3 = 8$, then $k - 2 = $ ————

8. The L.C.M of 5 and 8 is ————

3. Choose the correct answer :

1. Which of the following are relatively prime numbers ?

   A. 2 and 6   B. 4 and 9   C. 4 and 8   D. 15 and 10

2. The outlier value of the following data set : 23 , 25 , 27 , 24 , 94 , 21 , 22 and 26 is ————

   A. 21   B. 27   C. 49   D. 94

3. The lower quartile for the set of data : 60 , 61 , 63 , 64 , 70 , 72 , 75 , 77 and 79 is ————

   A. 61   B. 70   C. 62   D. 76

4. -8 ——— 4

   A. $<$ B. $>$ C. $=$ D. $\geq$

5. What is the range of the data set : 4 , 3 , 5 and 7 ?

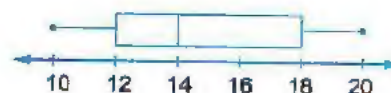   A. 4   B. 3   C. 5   D. 7

6. From the opposite box plot :

The difference between Q3 and Q1 equals ————

   A. 12   B. 14

   C. 10   D. 6

7. Ali has x pounds , if his brother give him 9 pounds, then he has _____ pounds.

   A. $x - 9$ **B.** $x + 9$ **C.** $9x$ **D.** $\dfrac{x}{9}$
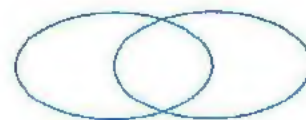
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4. Answer the following questions :

1. Order the given set of numbers from greatest to least.

$3.4 , -2\dfrac{1}{2} , 0 , -4\dfrac{3}{7} , 3\dfrac{1}{4}$

Greatest				Least
_____	_____	_____	_____	_____

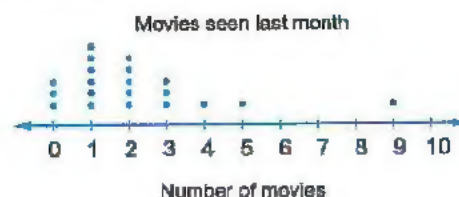**2.** ✷ The number of shares donated by the Food Bank's top donor is 1,250 shares. Are the shares can be distributed equally among 10 different branches of the Food Bank branches ?

_____

3. Find the G.C.F of the numbers 7 and 12 using Venn diagram.

_____

_____

_____

4. From the opposite dot plot answer the following questions.

  a. How many people saw 3 movies ?

_____

Movies seen last month

Number of movies

  b. How many people saw 2 movies or more ?

4	**Giza Governorate**	Education Administration of 6th October
		The Office of the Mathematics Advisor

1. Choose the correct answer :

1. The smallest natural number is _____

   A. 1   **B.** 2   **C.** 0   **D.** 1

2. "5 more than a number x" in algebraic expression is _____

   A. $5x$ **B.** $5 - x$ **C.** $5 + x$ **D.** $5 \div x$

3. -7 _____ -3

   A. $>$ **B.** $<$ **C.** $=$ **D.** otherwise

4. The range of the values : 8 , 4 , 2 , 6 , 1 , 7 and 9 is _____

   A. 2   **B.** 8   **C.** 6   **D.** 3

5. The number of terms in the expression : $3x + 2y - 5$ is _____

   A. 1   **B.** 2   **C.** 3   **D.** 4

6. The _____ is the middle value of data set after arranging it.

   A. mean   **B.** mode   **C.** median   **D.** rang

7. The independent variable in the equation : $a = 3b + 1$ is _____

   A. a   **B.** b   **C.** 3   **D.** 1

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2. Complete the following :

1. $6(2+5) =$ ——— $+$ ———

2. The opposite of the number -7 is _____

3. $6 \times 6 \times 6 \times 6 = 6^{\overline{}}$

4. $5 + (3^2 - 2) =$ ———

5. If $x + 5 = 11$, then $x =$ ———

6. The mean of the values : $5, 7, 6, 6$ and 1 is _____

7. "y equals five times x" in equation is _____

8. The inequality that represented by
the opposite number line is _____

Number line: $-4 \ -3 \ -2 \ -1 \ 0 \ 1 \ 2 \ 3 \ 4$ with filled dots at $0, 1, 2, 3, 4$

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3. Choose the correct answer :

1. The integer which just after -4 is _____

   A. -3 **B.** -5 **C.**   **D.** 0

2. $|-3| + |2| =$ ———

   A. 1   **B.** 5   **C.** 2   **D.** -1

3. The coefficient in the expression : $6 - 3 + 5x$ is _____

   A. 5   **B.** 3   **C.** 6   **D.** 0

4. "8 squared" in exponential form is _____

   A. 8^4 **B.** 8^3 **C.** 8^2 **D.** 8^5

5. The mode of the values : $2, 4, 2, 6, 2, 7$ and 3 is _____

   A. 2   **B.** 3   **C.** 7   **D.** 6

6. If $2m = 12$, then $m =$ ———

   A. 4   **B.** 6   **C.** 12   **D.** 24

7. The outlier of the values : $33, 36, 34, 2$ and 38 is _____

   A. 33   **B.** 36   **C.** 34   **D.** 2

4. Answer the following questions :

1. Using the opposite Venn diagram , complete.

   a. G.C.F = ————

   b. L.C.M = ————
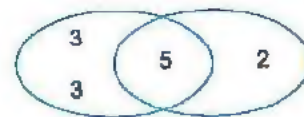
2. Evaluate : $y = 2x + 5$ at $x = 3$ ————

_____

_____

3. ✳ Determine which of the following numbers are divisible by 3.

   516 , 335 , 201 , 531 , 622 , 804 , 305

_____
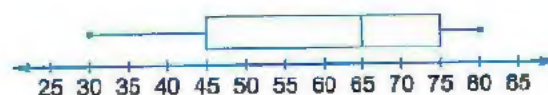
4. Complete using the opposite box plot :

Minimum value : ————

Maximum value : ————

Q1 : ————   Median : ————   Q3 : ————

5	Alexandria Governorate	Al-Agami Education Zone Mathematics Supervisor

1. Choose the correct answer :

1. From the opposite box plot :

   The upper quartile = ————

   A. 30   **B.** 32   **C.** 34   **D.** 36

2. Which of the following is NOT a numeric expression ?

   A. $2x + 1$ **B.** $4^2 - 7$ **C.** $3 + 7 \times 1$ **D.** $2^5 \div 4$

3. The mode of the data set : 7 , 6 , 4 , 8 , 1 , 5 , 11 and 4 is ————

   A. 5.5   **B.** 8   **C.** 4   **D.** 10

4. From the opposite Venn diagram , the G.C.F is ————

   A. 4   **B.** 6

   C. 9   **D.** 36
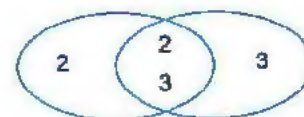
5. Which of the following are relatively prime numbers ?

   A. 3 and 6   **B.** 10 and 20   **C.** 14 and 15   **D.** 8 and 12

6. $3^4 = $ ————

   A. 4^3 **B.** 4×3 **C.** 3 cubed   **D.** $3 \times 3 \times 3 \times 3$

7. The algebraic expression of "three times a number is added to 7" is ————

   A. $m + 7$ **B.** $m - 7$ **C.** $3m - 7$ **D.** $3m + 7$

2. Complete :

1. $1\frac{2}{5} + 2\frac{3}{10} = $ ———————

2. In the equation : $y = 2x + 1$, the dependent variable is ————

3. The additive inverse of -6 is ————

4. The rule is "multiply by 8", where x is the independent variable, if $x = \frac{1}{2}$, then y would be ————

5. The range of the values : 20, 17, 18.5 and 24 is ————

6. $45 + 27 = 9 ($ ———— $+$ ———— $)$

7. The number of like terms in the expression : $7 + 2x + 3x$ is ————

8. The median of the values : 3, 7, 2, 9, 5 and 11 is ————

3. Choose the correct answer :

1. 7 ———— the set of integers.

   A. belongs to   **B.** doesn't belong to   **C.** is a subset of   **D.** isn't a subset of

2. ✳ The number 90 is NOT divisible by ————

   A. 3   **B.** 4   **C.** 5   **D.** 6

3. If $y = 1 + 2x$, then $(-, 7)$ satisfies the rule.

   A. 1   **B.** 2   **C.** 3   **D.** 4

4. The mean of 2, 3, 8, 9, 10 and 10 is ————

   A. 6   **B.** 7   **C.** 8   **D.** 9

5. The shape that shows individual data is the ————

   A. histogram.   **B.** dot plot.   **C.** box plot.   **D.** non of the previous.

6. Which of the following is one of the solutions of the inequality $x \geq -1$?

   A. -2 **B.** -3 **C.** -4 **D.** 0

7. The outlier of the data set : 101, 103, 105, 900 and 104 is ————

   A. 101   **B.** 105   **C.** 900   **D.** 104

4. Answer the following questions :

1. Order the given numbers from least to greatest.

   $-4, |-7|, 5, 0, -6$

   _____

2. Solve each of the following equations (SHOW YOUR WORK) :

   a. $5x = 30$

   _____

   b. $8 + x = 15$

   _____

3. From the opposite dot plot answer the following questions :

   Books read last month

   a. How may people were surveyed ?

   _____

   b. How many people read 3 books ?

   _____

4. Evaluate the expression : $14 \div n + 5^2$ at $n = 2$

   _____

   _____

6 El-Kalyoubia Governorate   Mathematics Supervision

1. Choose the correct answer :

1. The G.C.F of the two numbers 5 and 8 is _____

   A. 40   B. 12   C. 80   D. 1

2. $\dfrac{1}{2} - \dfrac{1}{3} =$ _____

   A. $\dfrac{2}{5}$ B. $\dfrac{1}{5}$ C. $\dfrac{2}{6}$ D. $\dfrac{1}{6}$

3. The numeric expression which represents the double of the number 3 is _____

   A. 3×2 B. 3×3 C. 3×4 D. 3

4. The inequality "the number y is greater than or equal to -7" can be written as _____

   A. $y > -7$ B. $y < -7$ C. $y \le -7$ D. $y \ge -7$

5. The rational number $-2\dfrac{1}{4}$ in the form of $\dfrac{a}{b}$ is _____

   A. $-\dfrac{7}{4}$ B. $\dfrac{7}{4}$ C. $-\dfrac{9}{4}$ D. $\dfrac{9}{4}$

6. The range of the set of values : 3 , 2 , 5 , 5 and 9 is _____

   A. 2   B. 5   C. 7   D. 9

7. The outlier of the set of values : 17 , 13 , 15 , 78 and 10 is _____

   A. 17   B. 13   C. 10   D. 78

2. Complete the following :

1. Distribute 18 biscuits and 12 chocolate equally in number of plates , then the greatest number of plates is _____

2. $3 + 5 \times 2^2 =$ _____

3. The algebraic expression of "add double of x to 3" is _____

4. The number and its additive inverse at equal distance on the number line from _____

5. The algebraic equation of "y equals 4 subtracted from the number x" is _____

6. The like terms in the expression : $5y + 5x + 5x^2 + 3 + 2x$ are _____ and _____

7. The median of the set of values : $3 , 6 , 8 , 2$ and 4 is _____

8. The favourite color is called _____ data.

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3. Choose the correct answer :

1. Salma has 9 fruits ; if she ate $\frac{4}{9}$ of it , then the remaining fruits is _____

    A. 4   **B.** 7   **C.** 5   **D.** 9

2. $35 + 42 = 7 \times (\text{—} + 6)$

    A. 6   **B.** 5   **C.** 4   **D.** 3

3. Which of the following is NOT a rational number ?

    A. 2   **B.** $\frac{3}{5-5}$ **C.** $\frac{4}{7-6}$ **D.** $7\frac{1}{2}$

4. $\frac{3}{5} \text{—} \frac{2}{7}$

    A. $>$ **B.** $<$ **C.** $=$ **D.** $\leq$

5. The mean of the set of values : $3 , 5 , 2 , 3$ and 2 is _____

    A. 15   **B.** 5   **C.** 4   **D.** 3

6. The mode of the set of values : $3 , 4 , 7 , 3$ and 8 is _____

    A. 3   **B.** 25   **C.** 5   **D.** 4

7. The number which does NOT belong to the inequality : $x \geq 2$ in the set of integers is _____

    A. 3   **B.** 2.5   **C.** 2   **D.** 4

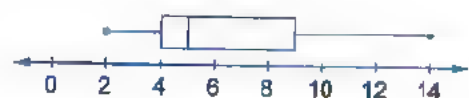
4. Answer the following questions :

1. Find the value of the algebraic expression : $x^2 + 1$ at $x = 2$

2. Write an equation use the variables x and y , where x is the independent, write the equation "multiply by 4 and add 3"

3. Solve the equation : $x + 4 = 10$

4. From the opposite box plot :

Find the lower quartile and the upper quartile.

0 2 4 6 8 10 12 14

1. Choose the correct answer :

1. The G.C.F of the two numbers 8 and 7 is _____

   A. 1   **B.** 3   **C.** 2   **D.** 0

2. 5 squared = _____

   A. 5^2 **B.** 5   **C.** 15   **D.** 5^3

3. $|-3|$ _____ the opposite of (-3)

   A. <   **B.** =   **C.** >   **D.** otherwise

4. ✳ The number 7 is a _____ of 35

   A. product   **B.** divisible   **C.** multiple   **D.** factor

5. In the equation : $x = 2y + 7$, the independent variable is _____

   A. y   **B.** x   **C.** 7   **D.** 7 y

6. "y equals 9 added to the number x" , in algebraic form is _____

   A. $x = y + 9$ **B.** $x = 9y$ **C.** $y = x + 9$ **D.** $y = 9x$

7. Which number does NOT belong to the set of natural numbers ?

   A. 3   **B.** 2   **C.** 0   **D.** -5

8. The number of terms of the expression : $2k - 3m + 5$ is _____

   A. 3   **B.** 2   **C.** 4   **D.** 5

9. The coefficient in the expression : $7x + 10$ is _____

   A. 3   **B.** 7   **C.** 10   **D.** 1

10. The greatest non-positive integer is _____

    A. 0   **B.** 1   **C.** -1 **D.** 2

11. The median of data : 2 , 9 , 7 , 4 and 10 is _____

    A. 2   **B.** 9   **C.** 7   **D.** 10

12. The best subset for the number 0 is _____ number.

    A. a counting   **B.** a natural   **C.** a rational   **D.** an integer

13. The mode of data set : 2 , 4 , 5 , 2 , 3 , 5 and 2 is _____

    A. 5   **B.** 3   **C.** 4   **D.** 2

14. 0 , 1 and 2 are some of the solutions of the inequality : _____

    A. X > 2   **B.** X ≤ 2   **C.** X ≥ 2   **D.** X > 3

2. Complete :

15. The range of data : 4 , 3 , 12 , 8 and 13 is _____

16. "Subtract 3 from the number y" in algebraic expression is _____

17. ———— $\times (6 + 7) = 30 + 35$

18. $|-7| + |2| =$ ————

19. The mean of data : $9 , 5$ and 7 is ————

20. The value of the expression : $4 m + 1 =$ ———— (at $m = 2$)

21. If $y + 7 = 9$, then $3 y =$ ————

22. The result of : $(3 \times 2^2) \div 6 + 3 =$ ————

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3. Answer the following :

23. From the opposite Venn diagram :
Find the G.C.F and the two numbers.

Prime factors of x Prime factors of y
7 2 3 5

24. From the box plot : the median = ————, the upper quartile = ————,
the lower quartile = ———— the maximum value = ————

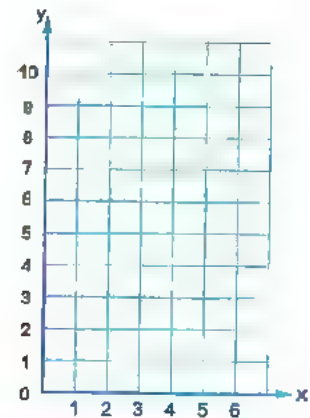0 1 2 3 4 5 6 7 8 9 10 11 12
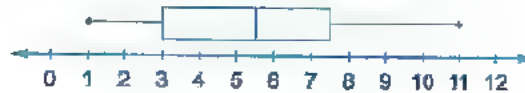
25. Find the result :

a. $\dfrac{3}{4} - \dfrac{2}{5} =$ ————

b. Find x if $3 x = 15$

26. Represent graphically the relation : $y = x + 1$
Complete the table

x	0	1	2
y	1	————	————
(x , y)	(0 , 1)	(—— , ——)	(—— , ——)

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8 **El-Monofia Governorate**   Ashmon Educational Directorate
Governmental Language School

1. Choose the correct answer :

1. The G.C.F of the two numbers 4 and 7 is ————

    A. 1   B. 2   C. 28   D. 11

2. $3^3 =$ ————

    A. 9   B. 6   C. 18   D. 27

3. The coefficient of 4d is ————

    A. 4   B. 1   C. d   D. 2

4. The solution of the equation : $8 + x = 19$ is _____

   A. 8   B. 10   C. 11   D. 27

5. The following data are numerical data except the _____

   A. length.   B. blood type.   C. weight.   D. age.

6. $\frac{3}{5} + \frac{1}{4} =$ _____

   A. $\frac{4}{9}$ B. $\frac{17}{20}$ C. $\frac{4}{20}$ D. $\frac{2}{20}$

7. The dependent variable in the equation : $y = 4x$ is _____

   A. 4   B. x   C. y   D. otherwise.

2. Complete :

1. If the equation : $y = x + 7$ and $x = 2$, then $y =$ _____

2. The expression of "subtract 3 from h" is written as _____

3. The median of : 7 , 8 , 9 , 3 and 10 is _____

4. The number whose additive inverse is itself is _____

5. The value of x in the equation : $5x = 50$ is _____

6. The constant of the expression : $m + 7$ is _____

7. The common multiple of all numbers is _____

8. The number whose prime factors are 3 , 3 and 5 is _____

3. Choose the correct answer :

1. The number of terms of the expression : $15 + 5k + 2$ is _____ term(s).

   A. 1   B. 2   C. 3   D. 5

2. -20 _____ -3

   A. $>$ B. $<$ C. $=$ D. $\geq$

3. The mode of the values : 5 , 23 , 6 , 9 , 5 , 4 and 5 is _____

   A. 4   B. 5   C. 6   D. nothing

4. The set of integers is a subset of the _____ numbers.

   A. natural   B. rational   C. counting   D. all previous

5. Which one of the following is a solution of the inequality : $x > -1$?

   A. -1 B. 0   C. -2 D. -3

6. $|-18| =$ _____

   A. -18 B. 17   C. -17 D. 18

7. The fraction which represents 2.5 is _____

   A. $\frac{25}{10}$ B. $\frac{25}{100}$ C. $-\frac{25}{10}$ D. $-\frac{25}{100}$

4. Answer the following questions :

1. Find the value of the expression : $(5 \times 9 - 2x) + 3^2$ when $x = 10$

_____

_____

2. Solve the equation : $x + 7 = 14$

_____

_____

3. Arrange the values in an ascending order :

$5 , -14 , |-20| , -7$

_____

_____

4. The following frequency is the marks of a maths exam :

Marks	17 - 25	26 - 34	35 - 43	44 - 52
Frequency	5	9	15	11

a. Represent data using histogram.

b. What is the number of students who got 25 marks or less ?

_____

_____

9 El-Gharbia Governorate   **Central Mathematics Supervision**

1. Choose the correct answer :

1. The G.C.F of 10 and 8 is _____

   A. 2   **B.** 18   **C.** 40   **D.** 80

2. The number of terms of the expression : $3x + 2y - 5$ is _____

   A. 2   **B.** 3   **C.** 4   **D.** 5

3. The better measure of central tendency

for the following data set is the _____

   A. mean.   **B.** median.   **C.** either.

4. Which of the following is a one of the solutions of the inequality : $m \geq -1$?

   A. -2 **B.** -3 **C.** -4 **D.** 0

5. "q is six times p added to 12" in equation is

   A. $q = 6p - 12$ **B.** $q = 6p + 12$ **C.** $p = 6q + 12$ **D.** $p = 6q - 12$

6. The lower quartile for the set of data : 72 , 64 , 79 , 63 , 60 , 75 , 70 , 61 and 77 is ____

A. 61   B. 70   C. 62   D. 76

7. The set of counting numbers ____ the set of integers.

A. belongs to   B. does not belong to

C. is a subset of   D. is not a subset of

---

2. Complete the following :

1. $5\frac{1}{2} + 3\frac{1}{5} =$ ____

2. The mean of the following values ⬚⬚⬚⬚ is ____

3. The value of the expression : $3n - 2$ for $n = 7$ is ____

4. The greatest negative integer is ____

5. The outlier value of the following data set is ____

101 , 103 , 105 , 102 , 107 , 106 , 7,000 , 104

6. In the equation : $m = 3n + 4$, the dependent variable is ____

7. The G.C.F of two relatively prime numbers is ____

8. $8 - 3 \times 2 \div (4 - 2) =$ ____

---

3. Choose the correct answer :

1. The additive inverse of -2 is ____

A. -2 B. 2   C. 0   D. 4

2. $|-3| + |-4| =$ ____

A. 1   B. -7 C. 7   D. 12

3. The range of the values : 5 , 10 , 7 and 4 is ____

A. 5   B. 6   C. 7   D. 10

4. Wael has x L.E. , his father gave him 5 L.E. , then he has now ____ L.E.

A. $x - 5$ B. $x + 5$ C. $5x$ D. $\frac{x}{5}$

5. The common factor of all numbers is ____

A. 0   B. 1   C. 2   D. 3

6. $3.8 >$ ____

A. 4.1   B. 5   C. -6.8 D. 8.9

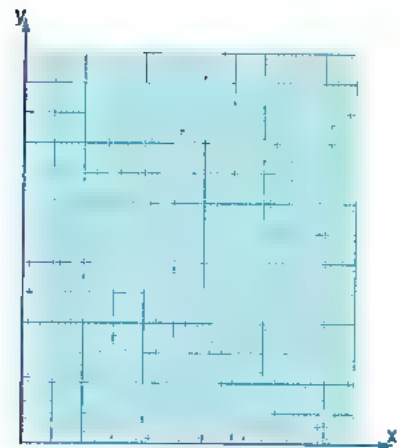**7.** $9(5 + 6) =$ ____ $+ 54$

A. 45   B. 95   C. 96   D. 36

4. **Answer the following questions :**

1. Complete the following table,
then represent it graphically.
The equation : $y = x + 1$

X	0	1	2
y	—	—	—
(x , y)	(0, —)	(1, —)	(2, —)

2. ✳ **From the following numbers :**
Circle the numbers which are divisible by 2, 3 and 5.
639, 165, 600, 582, 330

3. Arrange in a descending order : -8, $|-7|$, 2, 0, -5

4. Solve each of the following equations :

a. $5t = 20$

b. $7 + z = 17.8$

---

10 El-Dakahlia Governorate   Maths Supervision

1. **Choose the correct answer :**

1. The common factor for all numbers is _____

   A. 0   B. 1   C. 2   D. 3

2. ✳ Each whole number is divisible by _____

   A. 0   B. 1   C. 2   D. 5

3. $\frac{3}{5} - \frac{1}{2} =$ _____

   A. $\frac{2}{3}$ B. $\frac{1}{5}$ C. $\frac{1}{10}$ D. $\frac{4}{7}$

4. The coefficient of the algebraic term 4 K is _____

   A. 1   B. K   C. 4   D. -4

5. The outlier of the data set : 47, 45, 49, 43 and 125 is _____

   A. 82   B. 125   C. 43   D. 48

6. The expression which represents "number y added to 5" is _____

   A. $y + 5$ B. $y - 5$ C. $5y$ D. $\frac{y}{5}$

7. $-\frac{3}{7}$ _____ Zero

   A. $>$ B. $=$ C. $<$ D. $\geq$

75

2. Complete the following :

1. $|-7| = $ ――――

2. The exponent of 6^2 is ――――

3. The add tive inverse of the number 11 is ――――

4. The constant in the expression : $5y + 3$ is ――――

5. If $y = x - 5$ and $x = 8$, then $y = $ ――――

6. The mode of the values : $8, 5, 3, 8, 9$ and 4 is ――――

7. The number of terms of the expression : $3a + 2b + 5$ is ―――― terms.

8. The mean of the values : $15, 2, 10, 5$ and 3 is ――――

---

3. Choose the correct answer :

1. The following data are numerical except the ――――

    A. height.   **B.** weight.   **C.** blood type.   **D.** age.

2. $x > 8$ represents ――――

    A. an equation.   **B.** an expression.   **C.** an inequality.   **D.** a verbal.

3. The independent variable in the relation : $x + 2 = y$ is ――――

    A. x **B.** y **C.** 2   **D.** 1

4. From the opposite box plot :

    The third quartile is ――――

    A. 1   **B.** 2   **C.** 4   **D.** 6

5. $10^3 = $ ――――

    A. 10   **B.** 100   **C.** 1,000   **D.** 0.001

6. The first quartile of the values :

    $42, 35, 63, 7, 28, 21$ and 14 is ――――

    A. 7   **B.** 14

    C. 35   **D.** 21
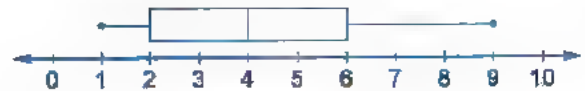
7. From the opposite histogram :

    The interval having the least

    frequency is ――――

    A. $0 - 1$ **B.** $4 - 5$

    C. $8 - 9$ **D.** $10 - 11$

---
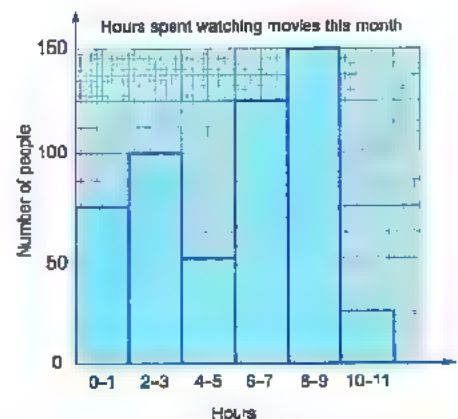
4. Answer the following questions :

1. In the opposite Venn diagram :

    a. G.C.F = ――――

    b. L.C.M = ――――

2. In the opposite box plot :

a. The median = _____

b. The range = _____

3. Find the result of : $(10 - 5) + 4 \times 3^2 \div 6$

_____

_____

4. Solve the equation : $x + 2 = 7$

_____

_____

11 **Ismailia Governorate**   **Directorate of Education**

1. **Choose the correct answer :**

1. In the opposite Venn diagram , the G.C.F is _____

   A. 5   **B.** 7

   C. 6   **D.** 210

2. The coefficient in the algebraic expression : $6 + 2x^2 - 4$ is _____

   A. $2x^2$ **B.** 2   **C.** x^2 **D.** 6

3. All the following are numerical data except the _____
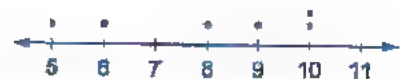
   A. age,   **B.** favourite sport.   **C.** height.   **D.** weight.

4. Which of the following expressions has the same value of : $3x + 5$ at $x = 3$?

   A. $3(x+1)+5$ **B.** $4x+1$ **C.** $5x+3$ **D.** x^2+5

5. The balanced point of the set of data which is represented by the opposite dot plot is _____

   A. 10   **B.** 9   **C.** 7   **D.** 8

6. The set of counting numbers _____ the set of rational numbers.

   A. belongs to   **B.** does not belong to

   C. is a subset of   **D.** is not a subset of

7. ✳ The number _____ is divisible by both 4 and 5

   A. 200   **B.** 315   **C.** 210   **D.** 745

2. **Complete the following :**

1. The additive inverse (opposite) of $|-3|$ is _____

2. "10 less than x equals y" in equation is _____

3. The mode of the values : 8 , 10 , 10 , 11 and 16 is _____

4. $\frac{2}{3} + \frac{3}{4} = $ _____

5. In the equation : $y - 3x + 3$, the independent variable is _____

6. The greatest non-positive integer number is _____

7. If $x + 3 = 5$, then $3x = $ _____

8. From the opposite box plot :

The range is _____

```
   •————————[   |      ]————————•
   10  11  12  13  14  15  16  17  18
```

---

3. Choose the correct answer :

1. The integer which comes just before (-2) is _____

   A. 3   **B.** -1 **C.** -2 **D.** -3

2. In the opposite Histogram ,
   how many students got
   more than 50 marks ?

   A. 100

   B. 80

   C. 30

   D. 110
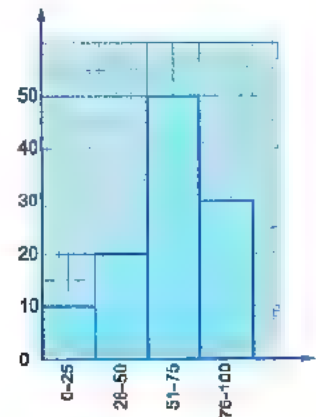
3. The best subset of the number zero is _____ number.

   A. a natural   **B.** an integer   **C.** a rational   **D.** a counting

4. Which of the following is one of solutions of the inequality : $m \geq -1$?

   A. -1 **B.** -2 **C.** -3 **D.** -4

5. The outlier value of the following data set is : 23 , 25 , 27 , 24 , 94 and 21 is _____

   A. 22   **B.** 27   **C.** 25   **D.** 94

6. The ordered pair which satisfies the equation : $y = 2x - 1$ is _____

   A. $(3,7)$ **B.** $(1,0)$ **C.** $(2,3)$ **D.** $(2,5)$

7. If the mean of the following data set : 5 , 12 , x , 9 and 7 is 7 , then $x = $ _____

   A. 35   **B.** 5   **C.** 7   **D.** 2

---

4. Answer the following questions :

1. Find four rational numbers lie between : -3.1 and -3.17

_____

_____

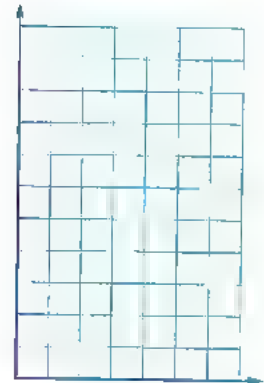2. **Evaluate the expression :**   (show your steps)

$$6 + 7(x^2 - 4) \text{ at } x = 3$$

_____

_____

78

3. Complete the following table according to the equation
$y = 2x + 1$, then make the graph

X	0	1	2
y			

4. Draw the box plot for the following data set : 14 ,5 ,15 , 9 ,13 , 4 , 6 and find :

   a. Median   **b.** Lower quartile (Q1)   **c.** Upper quartile (Q3)

_____

_____

_____

_____

_____

12 | **Port Said Governorate**   **Maths Inspection**

1. Choose the correct answer :

1. $-\dfrac{1}{5}$ $\dfrac{3}{10}$

   A. <   **B.** >   **C.** =   **D.** ≥

2. The constant in the algebraic expression : $4x + 5$ is _____

   A. 4   **B.** x   **C.** 5   **D.** 4x

3. The range of the numbers ; 19 , 14 , 17 , 9 and 12 is _____

   A. 5   **B.** 9   **C.** 19   **D.** 10

4. 5 cubed = _____

   A. 5×3 **B.** 5^3 **C.** 3^5 **D.** $5+5+5$

5. The _____ is the value that occurs most often.

   A. mode   **B.** range   **C.** median   **D.** mean

6. The L.C.M of 5 and 10 is _____

   A. 5   **B.** 10   **C.** 15   **D.** 50

7. From the opposite box plot :

   The upper quartile is _____

   A. 30   **B.** 35   **C.** 50   **D.** 55

2. Complete the following :

1. The opposite of $|-4|$ is _____

2. The coefficient in the algebraic expression : $5x - 6$ is _____

3. The mode of the values : $8, 6, 8, 7, 7$ and 8 is _____

4. The greatest negative integer is _____

5. If $5x = 45$, then $x =$ _____

6. The dependent variable in the equation : $n = 3m + 2$ is _____

7. The algebraic expression of "twice a number subtracted from 5" is _____

8. The outlier of the values : $31, 205, 207, 200, 206, 202$ and 209 is _____

3. Choose the correct answer :

1. $2\frac{7}{10} - 1\frac{1}{2} =$ _____

    A. $\frac{3}{10}$ B. $\frac{2}{10}$ C. $1\frac{2}{10}$ D. $1\frac{6}{10}$

2. All of the following are solutions of the inequality : $x \geq 3$ except _____

    A. 3   B. 4   C. 5   D. -10

3. The distance between 0 and -3 on the number line is _____ unit (s).

    A. 1   B. 0   C. -3 D. 3

4. The set of integers _____ the set of rational numbers.

    A. is a subset of   B. isn't a subset of   C. belongs to   D. doesn't belong to

5. The _____ is the sum of the values divided by their number.

    A. range   B. mode   C. mean   D. median

6. In the algebraic expression : $5x + 4 + 5m + 3$, the two like terms are _____

    A. 3 and $5m$ B. $5x$ and $5m$ C. 3 and 4 D. $5x$ and 3

7. The display shows data in intervals is the _____

    A. histogram.   B. bar graph.   C. dot plot.   D. box plot.

4. Answer the following questions :

1. In the opposite Venn diagram,

    find the G.C.F of the shown numbers.

Prime factors of 70   Prime factors of 30

7   2   5   3
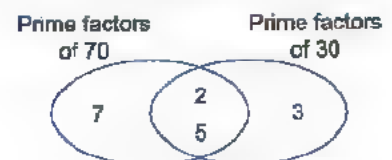
2. Find the value of the algebraic expression : $6 \div (8x - 3)$ when $x = 0.5$

3. Solve the equation : $25 + x = 42$

_____

_____

4. Find the mean and median for the following data :

$$26 , 22 , 28 , 41 , 24 , 25 , 23$$

(a) The mean = _____

(b) The median = _____

19 **Demietta Governorate**   **Salah El-Deen El-Ayouby L.S**

1. Choose the correct answer :

1. The mean of a set of values = their sum _____ their number.

   A. +   **B.** ×   **C.** ÷   **D.** –

2. The number whose prime factors are 2 , 3 and 5 is _____

   A. 11   **B.** 15   **C.** 35   **D.** 30

3. The value of the expression : $x + 3$ when $x = 4$ is _____

   A. 1   **B.** 7   **C.** 12   **D.** 43

4. -11 ____ -8

   A. >   **B.** <   **C.** =   **D.** ≥

5. $10^2 = $ _____

   A. 10   **B.** 20   **C.** 100   **D.** 1,000

6. In the algebraic expression : $x + 2y + 4$, the constant is _____

   A. 0   **B.** 1   **C.** 2   **D.** 4

7. _____ is not a natural number.

   A. 0   **B.** 2,000   **C.** 500   **D.** -33

2. Complete the following :

1. The opposite of -16 is _____

2. The greatest common factor of 5 and 8 is _____

3. $(4 \times 2) + (4 \times 3) = 4 (3 + $ _____ $)$

4. The algebraic expression that represents "Take 14 away from a number x" is _____

5. If $x < 1$ and x belongs to the set of natural number , then $x = $ _____

6. The coefficient in the algebraic expression : $17 + 5 + x$ is _____

7. The outlier value of these set of data : 1 , 1 , 2 , 3 , 4 and 91 is _____

8. The mean of these values : 4 , 6 and 5 is _____

3. Choose the correct answer from those given :

1. $\frac{1}{5} + \frac{1}{3} =$ —————

    A. $\frac{1}{15}$ **B.** $\frac{1}{8}$ **C.** $\frac{8}{35}$ **D.** $\frac{8}{15}$

2. The two expressions : $2x + x$ and $2(x + 2)$ are equal when $x =$ —————

    A. 4   **B.** 3   **C.** 2   **D.** 1

3. The mode of these set of data : $0 , 1 , 7 , 5 , 6 , 0 , 1$ and 0 is ————

    A. 0   **B.** 1   **C.** 7   **D.** 3

4. From the opposite histogram :

    The number of students who obtained

    20 marks or more is ————

    A. 9

    B. 6

    C. 2

    D. 3
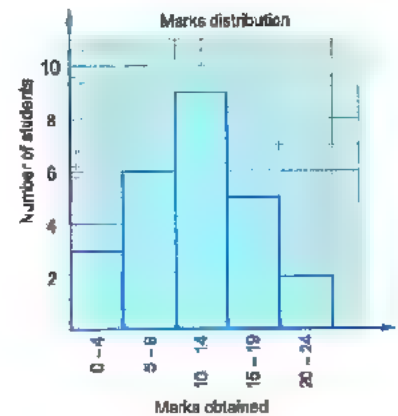
5. The balance point of these set of data : $1 , 1 , 3 , 5$ and 5 is

    A. 5   **B.** 0   **C.** 3   **D.** 1

6. ———— belongs to the solutions of the inequality $x \geq 4$

    A. 0   **B.** -5 **C.** -4 **D.** 4

7. y is the independent variable in the equation : ————

    A. $y + 5 = x$ **B.** $x + 3 = y$ **C.** $y = x + 2$ **D.** $3x = y$

4. Answer the following questions : (Show your steps)

1. Evaluate the expression : $9(P^2 - 20)$ for $P = 5$

2. Solve the equation : $x + 8 = 17$

3. The opposite Venn diagram represents the prime factors of the two numbers x and y. Find :

a. x = ―――――――――

b. y = ―――――――――

c. The G.C.F of x and y ―――――――――

d. The L.C.M of x and y ―――――――――

Prime factors of x   Prime factors of y

4. From the opposite box plot find :

a. The median ―――――――――

b. Lower quartile (Q1) ―――――――――
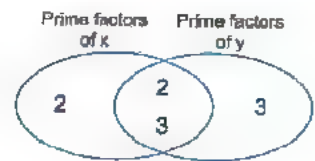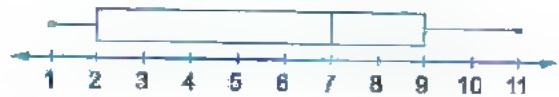
c. Upper quartile (Q3) ―――――――――

d. The range ―――――――――

14 | El-Beheira Governorate

Rashid Educational Zone
Maths Supervision / Rashid Lang. Sch.

1. Choose the correct answer :

1. $\dfrac{2}{7}+\dfrac{3}{7}+\dfrac{5}{7}+\dfrac{4}{7}=$ ―――――

   A. 1   **B.** 2   **C.** 3   **D.** 7

2. The rational number between 0.3 and 0.4 is ―――――

   A. 0.31   **B.** 0.45   **C.** 0.25   **D.** 0.53

3. "k equals the product of m and 3" as an equation is ―――――

   A. $m=3k$ **B.** $k=m+3$ **C.** $k=m-3$ **D.** $k=3m$

4. If $x-2=7$, then $x=$ ―――

   A. 5   **B.** 7   **C.** 9   **D.** 11

5. ――――― is one of the solutions of the inequality $x>3$

   A. 2   **B.** 3   **C.** 4   **D.** −5

6. In the opposite graph, the balance point is ―――――

   A. 6   **B.** 5

   C. 4   **D.** 2

7. The better measure of center tendency for the following data set is ―――――

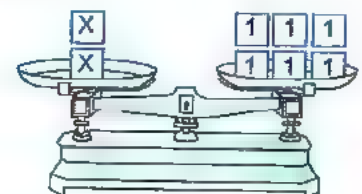   **A.** the mean.   **B.** the median.   **C.** either.   **D.** the histogram.

2. Complete the following :

1. The number 1.2 in the form $\dfrac{a}{b}$ is ―――――

2. The equation that represents the opposite figure is ―――――

3. $5^3 =$ _____

4. In the algebraic expression : $2n+7$, the coefficient is _____ .

5. $|-4| =$ _____

6. The value of the expression : $x+5$ for $x=4$ is _____

7. The mode of : $7 , 9 , 7 , 8 , 7 , 6 , 7$ and 10 is _____

8. In the opposite box plot

   , the range $=$ _____

3. Choose the correct answer :

1. The smallest natural number is _____
   - A. -1
   - B. -2
   - C. 0
   - D. 1

2. In the opposite Venn diagram , the L.C.M is _____
   - A. 2
   - B. 15
   - C. 30
   - D. 10

3. If $3x = 27$, then $x =$ _____
   - A. $27+3$
   - B. $27-3$
   - C. 27×3
   - D. $27 \div 3$

4. In the equation : $m = 3n+4$, the dependent variable is _____
   - A. m
   - B. 3
   - C. n
   - D. 4

5. The mean of the values : $3 , 5$ and 4 .s _____
   - A. 12
   - B. 5
   - C. 4
   - D. 3

6. Which display makes it easier to see the median ?
   - A. Histogram
   - B. Box plot
   - C. Dot plot
   - D. Bar graph

7. The outlier of the data set : $3 , 5 , 7 , 8 , 31$ and 9 is _____
   - A. 3
   - B. 9
   - C. 31
   - D. 8

4. Find the result of each of the following :

1. Use the order of operations to simplify :

   $(15-9) + 2 \times 3^2$

   _____

   _____

2. Solve the following equation :

   $x+2=7$ _____

3. Compete the following table of the equation : $y = 2x+1$

x	0	1	3	5
y	—	—	—	—

4. Draw the box plot for the following data :

$$5 , 7 , 2 , 1 , 2 , 10 , 3$$

min = ——— , max = ——— , median = ——— , Q1 – ——— , Q3 = ———

0 1 2 3 4 5 6 7 8 9 10 11 12

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15 El-Fayoum Governorate

Directorate of Education
Supervision of mathematics

1. Choose the correct answer :

1. The smallest counting number is _____

A. 0   B. 1   C. 2   D. 3

2. ✱ The number _____ is divisible by 6

A. 324   B. 661   C. 512   D. 603

3. $18 + 9 = 9 (2 + ———)$

A. 0   B. 1   C. 2   D. 3

4. The mean of : 3 , 7 , 8 and 2 is _____

A. 20   B. 5   C. 4   D. 3

5. If the mean of : 8 , 6 , x and 5 is 5 , then x = ———

A. 0   B. 1   C. 6   D. 3

6. Five squared = ———

A. 2^5 B. 5^2 C. 5^5 D. 2^2

7. $\dfrac{-1}{2}$ — zero

A. >   B. <   C. =   D. ≥

---

2. Complete :

1. $(3^2 + 4) \div 13 = $ ———

2. The verbal expression of : $2 m - 7$ is _____

3. ✱ The number is divisible by 5 if its Ones digit is _____

4. The common multiple of all numbers i s _____

5. ✱ The smallest 3-digit number divisible by 2 , 5 and 10 is _____

6. The balance point of the opposite data is _____

7. The mode of the data : 2 , 5 , 2 , 3 , 2 , 6 and 2 is _____

2   3   4   5   6

8. The constant in the algebraic expression : $5 x + 3 b + 4$ is _____

---

3. Choose the correct answer :

1. The best subset of $\dfrac{1}{5}$ is _____ number.

A. a counting   B. an integer   C. a natural   D. a rational

85

2. The median of the values : 9 , 4 , 8 , 1 and 3 is _____ .

   A. 4   **B.** 1   **C.** 2   **D.** 3

3. The number _____ is a one of solutions of the inequality $x < 4$

   A. 10   **B.** −1   **C.** 12   **D.** 5

4. The range of the values : 6 , 3 , 9 , 2 and 1 is _____

   A. 4   **B.** 8   **C.** 2   **D.** 7

5. If $x + 2 = 12$, then $x =$ _____

   A. 4   **B.** 6   **C.** 10   **D.** 3

6. The independent variable in the equation : $5L - 3 = M$ is _____

   A. L   **B.** M   **C.** 2   **D.** 3

7. The outlier value of the following data : 91 , 94 , 93 , 5 , 99 and 90 is _____

   A. 4   **B.** 1   **C.** 5   **D.** 3

4. Answer the following questions :

1. Draw the box plot for the values : 7 , 0 , 6 , 2 , 3 , 1 , 9

   Min = _____ , Q1 = _____ , Median = _____ , Q3 = _____ , Max = _____

2. Find the G.C.F of the numbers 24 and 18

3. Evaluate : $5^2 + 8 \div (6 - 2)$

4. ✻ The Food Bank needs to distribute 116 food boxes.

   Is It possible to distribute the boxes equally among 4 villages ?

16   **El-Menia Governorate**   Bani Mazar Educational Administration
                                                  Bani Mazar G.L.S

1. Choose the correct answer :

1. -8 _____ -4

   A. >   **B.** <   **C.** =   **D.** ≥

2. The median of the values : 9 , 4 , 8 , 1 and 3 is _____

   A. 3   **B.** 4   **C.** 5   **D.** 8

3. $4 \times 4 \times 4 =$ _____

   A. 3×4 **B.** 3 cubed   **C.** 4 cubed   **D.** 3 squared

4. Which algebraic expression is equivalent to : $10x + 15$?

   A. $5(2x+3)$ B. $(5x+10)$ C. $2x+3$

5. The number of terms of the expression : $5x + 3y - 1$ is _____

   A. 3   B. 5   C. -1 D. 1

6. If $x + x = 12$, then $x =$ _____

   A. 0   B. 2   C. 6   D. 24

7. The opposite of 6 is _____

   A. 6   B. 0   C. -6 D. -10

---

2. Complete :

1. The value of the expression : $4L - 2$ for $L = 3$ is _____

2. In the equation : $5x + 3 = y$, the dependent variable is _____

3. The smallest non-negative rational number is _____

4. $|-1\frac{1}{4}| \div 1\frac{1}{4} =$ _____

5. $8(5+4) = 40 +$ _____

6. The types of statistical data are _____

7. The smallest counting number is _____

8. If $m - 2 = 7$, then $m + 1 =$ _____

---

3. Choose the correct answer :

1. The mean of the values : $3, 5, 4, 7$ and 6 is _____

   A. 1   B. 4   C. 5   D. 7

2. The lower quartile for the set of data : $23, 21, 17, 18, 20$ and 19 is _____

   A. 17   B. 18   C. 19   D. 20

3. The first operation you preform in the expression : $10 \div 5 + (3-1)^2$ is the _____

   A. addition.   B. subtraction.   C. exponent.   D. division.

4. In the equation : $y = \frac{x}{4}$, if the input is 12, then the output is _____

   A. 48   B. 3   C. $12\frac{1}{4}$ D. $11\frac{3}{4}$

5. Which of the following is an algebraic expression ?

   A. $3^2 - 4$ B. $5x + 3$ C. $29 - 3^3$ D. $2(4+5)$

6. "10 less than a number" is written as _____

   A. $x - 10$ B. $1 - x$ C. $10 + x$ D. $\frac{x}{10}$

7. The number -9 _____ the set of rational number.

   A. belongs to   B. is a subset of

   C. does not belong to   D. is not a subset of

4. Answer the following questions :

1. ✳ **From the set of data :** $152 , 39 , 720 , 500$ and 221

   The numbers are divisible by 2 are _____

2. Find the L.C.M of 4 and 6 using Venn diagram.

   _____

   _____

3. From the opposite box plot :

   The difference between Q_3 and Q_1 is _____

4. Complete the following table according to the equation :

$$y = 2x + 1$$

x	0	4	1	2
y				

17	**Qena Governorate**	Math General Supervision Experimental Language School

1. Choose the correct answer :

1. -4 ____ -1

   A. $<$ **B.** $>$ **C.** $\geq$ **D.** $=$

2. The median for the data set : $72 , 64 , 77 , 61 , 79 , 63 , 76 , 75$ and 60 is _____

   A. 61   **B.** 60   **C.** 72   **D.** 79

3. If $y = 2x + 1$ and $x = 2$, then $y =$ _____

   A. 2   **B.** 1   **C.** 4   **D.** 5

4. The opposite number for $-\dfrac{1}{3}$ is _____

   A. $\dfrac{1}{3}$ **B.** 1   **C.** 3   **D.** -3

5. If $5 \times 5 \times 5 \times 5 = 5^n$, then $n =$ _____

   A. 5   **B.** 4   **C.** 1   **D.** 0

6. $6(\underline{\hspace{1cm}} + 2) = 48$

   A. 2   **B.** 40   **C.** 6   **D.** 48

7. $3 + 5 - 4 + 2^2 =$ _____

   A. 8   **B.** 4   **C.** 6   **D.** 10

2. Complete the following :

1. The verbal form of : $m + 2$ is _____

2. In the opposite Venn diagram , the G.C.F is _____

3. $3\frac{1}{9} + 1\frac{8}{9} =$ _____

4. The smallest number of the following $(0.1 , -\frac{1}{10} , 0.7 , 2.1)$ s _____

5. If $k + 1 = 5$, then $k - 2 =$ _____

6. The distance between $- 3$ and 3 on the number line is _____ units.

7. The range $=$ _____

8. $(2 ,$ _____ $)$ satisfies the equation : $y = \frac{1}{2}x + 2$

3. Choose the correct answer :

1. Which of the following is a prime number ?

   A. 6   B. 7   C. 8   D. 10

2. The outlier value of the following data set : 23 , 25 , 27 , 24 , 94 , 21 , 22 and 26 is _____

   A. 21   B. 27   C. 49   D. 94

3. The upper quarti.e for the set of data : 72 , 64 , 79 , 63 , 60 , 75 , 70 , 61 and 77 is _____

   A. 61   B. 70   C. 62   D. 76

4. If Ali has x L.E and his father gave him 5 L.E , then he has _____ L.E.

   A. $x + 5$ B. $5 - x$ C. $5x$ D. $\frac{x}{5}$

5. "7 less a number" is written as _____

   A. $x - 7$ B. $7 - x$ C. $14 + x$ D. $\frac{x}{7}$

6. $2^3 =$ _____

   A. 2×2 B. 3×3 C. 3^2 D. 8

7. A number if added to 7 , the result is 13, then the number is _____
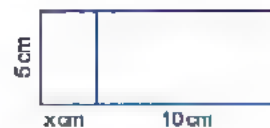
   A. 5   B. 20   C. 6   D. 15

4. Answer the following questions :

1. Complete the following table according to the equation : $y = 2x + 1$

x	0	4	8	10
y				

2. Evaluate the expression : $5x^2 + 8 \div (6 - 4) \div 2$, at $x = 3$

_____

_____

3. Write the algebraic expression to find the area of the opposite figure :

_____

_____

_____

4. Order the following numbers from the smallest to the greatest :

$3.4 \ , \ -2\frac{1}{2} \ , \ 0 \ , \ -4\frac{3}{7} \ , \ 3\frac{1}{4}$

Smallest				Greatest
_____	_____	_____	_____	_____

1B **Luxor Governorate**

Maths Inspection
Esna Governmental Language School

1. **Choose the correct answer :**

   1. The greatest non-positive integer is _____
      - **A.** 0
      - **B.** −1
      - **C.** 1
      - **D.** 100

   2. In the algebraic expression : $x + 4$, the constant is _____
      - **A.** 4
      - **B.** 2
      - **C.** 3
      - **D.** 1

   3. If $x + 3 = 5$, then $4x =$ _____
      - **A.** 0
      - **B.** 8
      - **C.** 10
      - **D.** 2

   4. The algebraic expression of "the product of 7 and x added to 3" is written as _____
      - **A.** $7 + 3x$
      - **B.** $7x + 3$
      - **C.** $7 \div 3x$
      - **D.** $7x - 3$

   5. All the following are solutions of the inequality $x < 0$ except _____ .
      - **A.** −5
      - **B.** −1
      - **C.** −6
      - **D.** 2

   6. The L.C.M of 5 and 7 is _____
      - **A.** 14
      - **B.** 1
      - **C.** 7
      - **D.** 35

   7. _____ $(5 + 3) = 35 + 21$
      - **A.** 8
      - **B.** 4
      - **C.** 6
      - **D.** 7

2. **Complete the following :**

   1. The common multiple of all numbers is _____
   2. $\frac{1}{3} + \frac{1}{2} =$ _____
   3. The number of integers between − 2 and 3 is _____
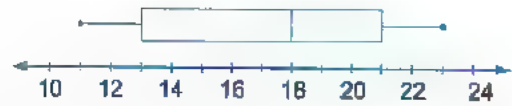   4. The opposite of zero is _____
   5. $|-2| \times |0| =$ _____
   6. The number of terms of the expression : $3 + 5d$ is _____
   7. The ordered pair which satisfies the rule : $y = x + 3$ is (1, _____)

8. From the opposite box plot :

The median = —————


```
10  12  14  16  18  20  22  24
```

3. Choose the correct answer :

1. The outlier of the following data set : 90 , 80 , 85 , 87 , 3 and 91 is ————

   A. 7   **B.** 80   **C.** 3   **D.** 90

2. In the equation : $x = 4y + 3$, the dependent variable is ————

   A. 3   **B.** 4   **C.** y   **D.** x

3. The value of the algebraic expression : $3a + 5$ for $a = 4$ is ————

   A. 7   **B.** 17   **C.** 15   **D.** 10

4. ✱ The number ———— is divisible by 2 and 3

   A. 111   **B.** 552   **C.** 11   **D.** 101

5. The mean of the set of values : 3 , 8 , 7 and 2 is ————

   A. 4   **B.** 7   **C.** 8   **D.** 5

6. The range of the set of values : 6 , 5 , 9 , 4 , 11 , 3 and 7 is ————

   A. 3   **B.** 6   **C.** 9   **D.** 8

7. Seven squared = ————

   A. 7^3 **B.** 2×7 **C.** 2^7 **D.** 7^2

4. Answer the following questions :

1. Find three rational numbers lying between $\dfrac{1}{7}$ and $\dfrac{5}{7}$.

————————————————————————

————————————————————————

2. Find the G.C.F and L.C.M of 20 and 30

————————————————————————

————————————————————————

3. $5(2^3 + 2) - 30 \div 3 = $ ————————————————

————————————————————————

4. Order the given set of numbers from least to greatest.

$$2.6 , 1.3 , -2.5 , \text{zero} , -1.7$$

————————————————————————

————————————————————————

19 **Aswan Governorate**

Kom Ombo Educational Zone
Math Department

1. Choose the correct answer :

1. $1\frac{3}{5} + 2\frac{1}{5} =$ _____

  A. $3\frac{4}{5}$ **B.** $3\frac{4}{10}$ **C.** $1\frac{2}{5}$ **D.** $1\frac{1}{10}$

2. The mode of the values : 9 , 3 , 2 , 8 , 3 , 7 and 3 is _____

  A. 2   **B.** 7   **C.** 3   **D.** 5

3. The opposite of (– 12) is _____

  A. – 1   **B.** 2   **C.** 12   **D.** – 12

4. The number 2.71 belongs to the set of _____ numbers.

  A. counting   **B.** natural   **C.** integer   **D.** rational

5. In the equation : $y = x + 4$, the dependent variable is _____

  A. y   **B.** 3   **C.** x   **D.** 4

6. The median of the values : 9 , 4 , 3 , 8 , 1 and 10 is _____

  A. 6   **B.** 4   **C.** 3   **D.** 5

7. All the following are a solutions of the inequality $x < – 1$ except _____

  A. – 5   **B.** – 4   **C.** – 3   **D.** zero

2. Complete the following :

1. In the equation : $y = 6x + 4$, if $x = 3$, then y _____

2. The constant in the expression : $5m + 2$ is _____

3. If the sum of 8 values equals 48 , then the mean of this values = _____

4. ✻ The smallest number which can be added to 254 to make the result divisible by both 2 and 5 is _____

5. If $b – 2 = 7$, then $b =$ _____

6. The smallest natural number is _____

7. The number of terms of the expression : $3x + 2y – 5$ is _____

8. $|-3| + |-4| =$ _____

3. Choose the correct answer :

1. The opposite figure represents the _____

  A. histogram.   **B.** box plot.

  C. dot plot.   **D.** bar graph.

2. The range of the values : 7 , 10 , 9 , 5 and 4 is _____

  A. 5   **B.** 6   **C.** 7   **D.** 10

3. $2^3 = $ —————

    A. 2×2 **B.** 3×3 **C.** 3^2 **D.** 8

4. Which expression is equivalent to $2x + 10$?

    A. $2(x+5)$ **B.** $12x$ **C.** $20x$ **D.** $2x + 5 + 2$

5. $-3\dfrac{1}{7}$ ——— $-3\dfrac{1}{4}$

    A. $<$ **B.** $>$ **C.** $=$ **D.** $\leq$

6. The outlier of the following values : 5 , 38 , 9 , 7 and 3 is ——

    A. 3   **B.** 38   **C.** 5   **D.** 9

7. From the opposite histogram :

  How many students got
  more than 50 marks ?

    A. 20

    B. 50

    C. 70

    D. 120
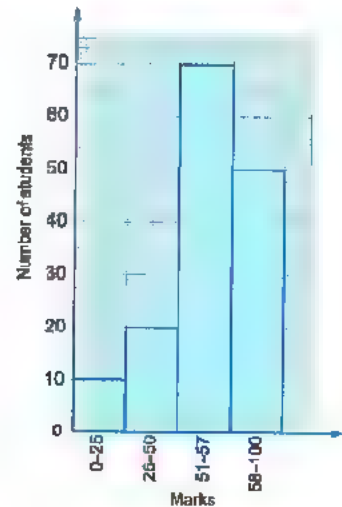
4. **Answer the following questions :**

1. **From the opposite Venn diagram.**

  Complete :

Prime factors of x   Prime factors of y

  a. The two numbers are ———— and ————

  b. The G.C.F of the two numbers = ————

  c. The L.C.M of the two numbers = ————
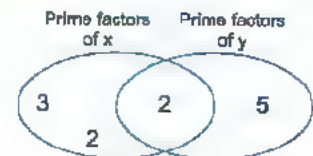
2. Use the order of mathematical operations to simplify :-

  $40 + 5(3^2 - 7) + 10$

3. Use the following box plot
  to complete the following :

  Min. = ————   Q1 = ————

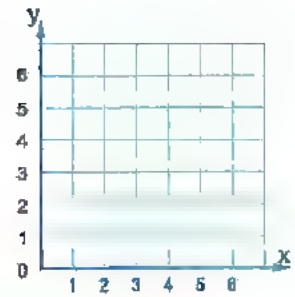 Median = ————   Q3 = ————

  Max. = ————

4. **Complete the following table,**

then represent it graphically.

The equation : $y = x + 1$

x	0	2	3
y	——	— —	——
(x , y)	(0 , ——)	(2 , ——)	(3 , ——)

20 | **South Sinai Governorate**

Educational Directorate
El-Tur Educational Zone

1. **Choose the correct answer :**

1. The L.C.M of the two numbers 18 and 12 is _____

  A. 18   **B.** 20   **C.** 30   **D.** 36

2. $9 \times (7 + 6) = 9 \times 7 + 9 \times$ _____

  A. 5   **B.** 6   **C.** 7   **D.** 9

3. The algebraic expression of "divide n by 5 , then add 3" is _____

  A. $5n + 3$ **B.** $\frac{n}{5} + 3$ **C.** $3n + 5$ **D.** $\frac{n}{3} + 5$

4. All the following are numerical data except the _____

  A. age.   **B.** height.   **C.** weight.   **D.** favourite color.

5. The number of terms of the express on : $5x + 3 + m$ is _____

  A. 2   **B.** 3   **C.** 4   **D.** 5

6. The median of the values : 10 , 6 , 4 , 17 and 8 is _____

  A. 4   **B.** 6   **C.** 8   **D.** 10

7. The set of the natural numbers _____ the set of rational numbers.

  A. belongs to   **B.** does not belong to

  C. is a subset of   **D.** is not a subset to

2. **Complete the following :**

1. ✳ All numbers except zero is divisible by _____

2. The range of the values : 1 , 8 , 3 , 5 and 17 is _____

3. The additive inverse of -5 is _____

4. The variable in the expression : $5x - 4$ is _____

5. The number of like terms in the expression : $4n + 2n + 2$ is _____

6. $\frac{4}{5} + \frac{1}{6} =$ _____

7. If $x + 8 = 15$, then the value of $x =$ _____

8. The mode of the values : 8 , 5 , 3 , 6 , 8 and 4 is _____

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3. Choose the correct answer :

1. All of the following are the solutions of the inequality $x > 3$ except _____

   A. -1 **B.** 5   **C.** 9   **D.** 11

2. The coefficient in the algebraic expression : $7x + 4$ is

   A. 3   **B.** 4   **C.** 7   **D.** x

3. The horizontal axis includes numerical periods in the _____

   A. bar graph.   **B.** double bar graph.   **C.** histogram.   **D.** dot plot.

4. $6^2 =$ _____

   A. 6×2 **B.** 2^6 **C.** 6×6 **D.** 12

5. The independent variable in the equation : $y = 2x + 5$ is _____

   A. x **B.** 2   **C.** 5   **D.** y

6. $|-3|$ _____ -4

   A. $<$ **B.** $>$ **C.** $=$ **D.** $\leq$

7. The lower quartile for the set of data : 42 , 35 , 63 , 7 , 28 , 21 and 14 is _____

   A. 14   **B.** 28   **C.** 42   **D.** 63

4. Answer the following questions :

1. Find the value of the numeric expression : $(15 - 9) + 3^2 \times 4$

2. Find the arithmetic mean of the following set of values : 5 , 8 , 7 , 6 and 4

3. Find the value of the expression : $(2x + 3) - 5$ at $x = 3$

4. Arrange the following numbers in a descending order : $-3 , \dfrac{1}{2} , 0.8 , -1\dfrac{1}{4}$

خطوة 1

خطوة 2
اختيار اسم الطابعة بتاعتك

خطوة 3
كتابة الصفحات المراد طباعتها
نكتب رقم 4 ثم نكتب الشرطة دي – ثم نكتب 9

خطوة 4
اختيار نوع الورق

خطوة 5
اختيار A4

خطوة 6
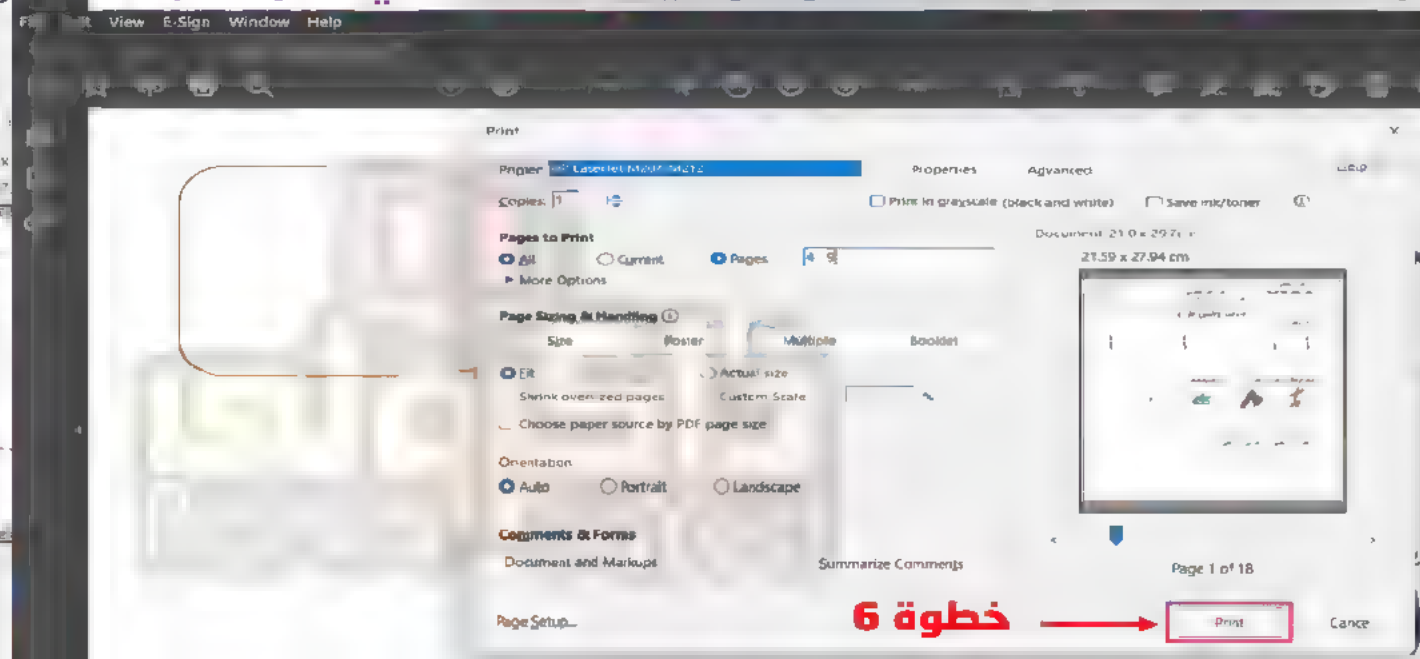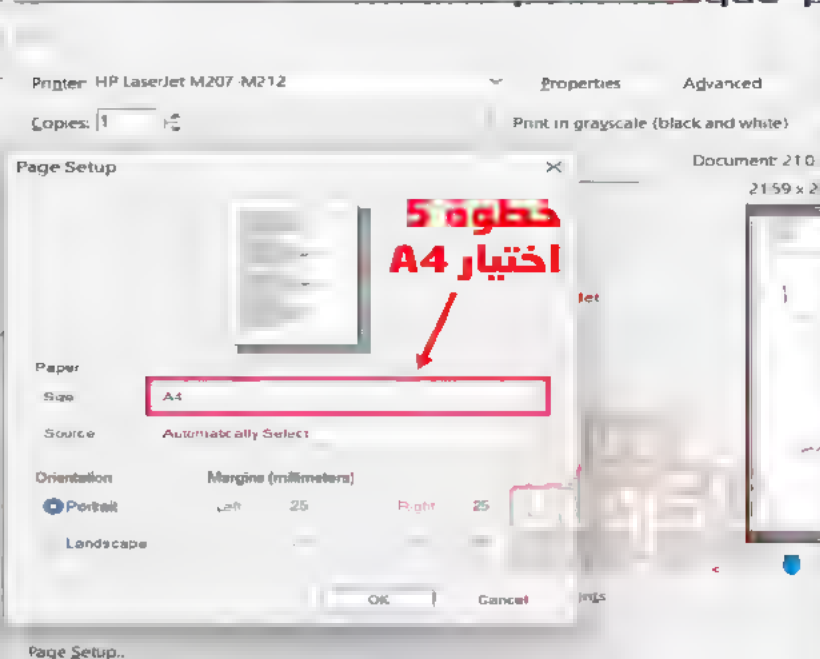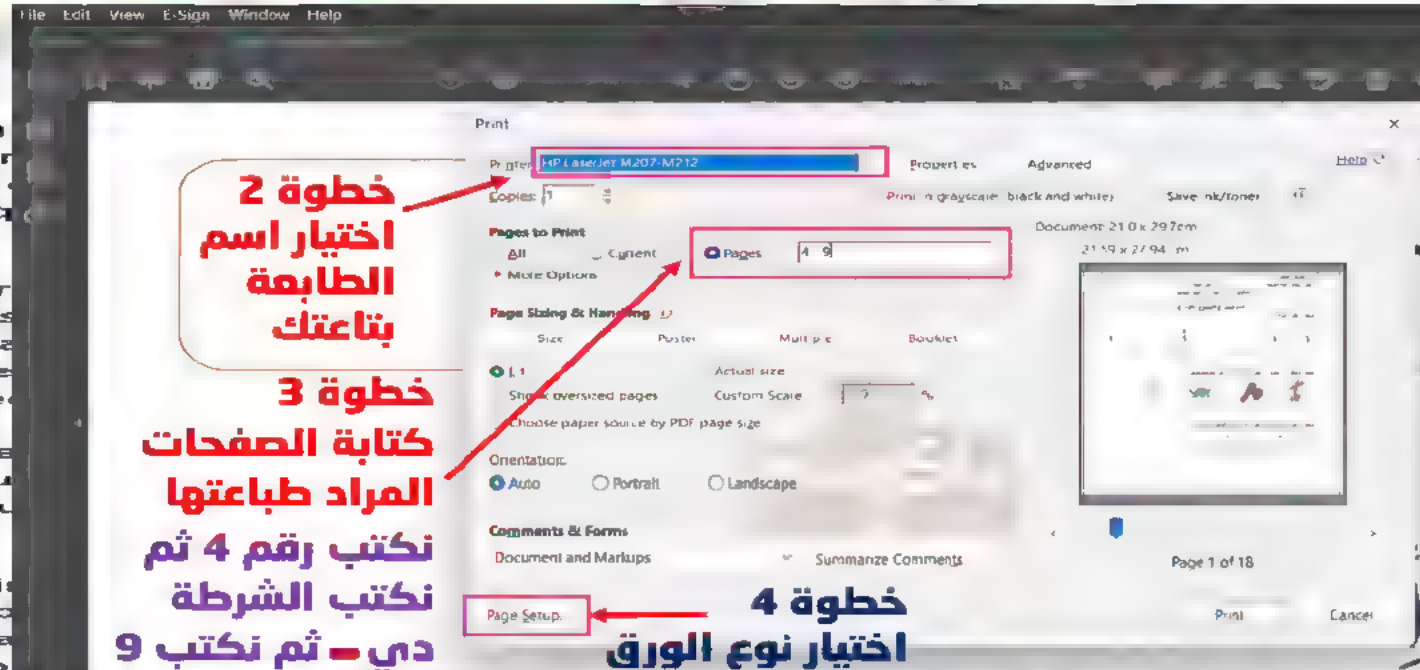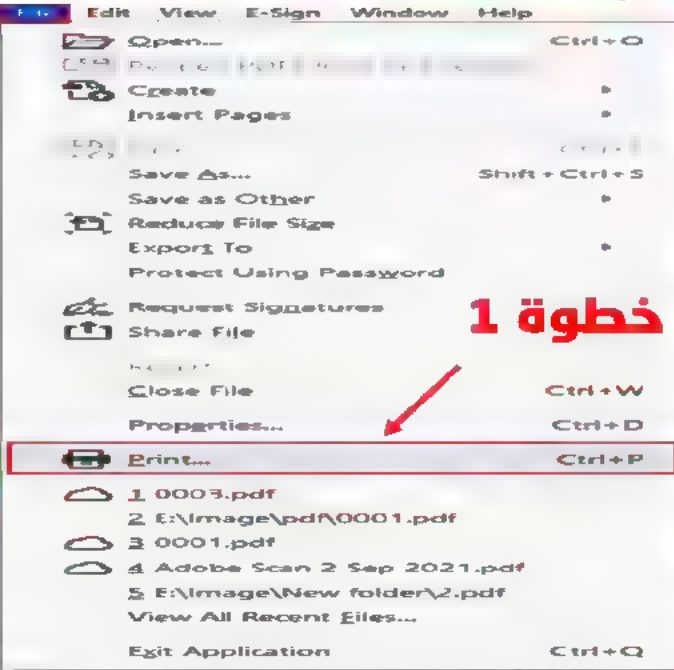
امتحانات رقم (2)

الترم الاول

Model

First: **Choose the correct answer:**

ⓐ The GCF of 4 and 15 is ___ . (0 or 1 or 4 or 5)

ⓑ $1\frac{3}{4} + 2\frac{1}{2} =$ ___ ($4\frac{1}{4}$ or $3\frac{1}{4}$ or $3\frac{4}{6}$ or 4)

ⓒ In the algebraic term " $-3 \times y$ ", the coefficient is ___ .

(y or x or 3 or -3)

ⓓ If we subtract 5 from x, the result is ___ .

(x + 5 or x − 5 or 5 − x or 5x)

ⓔ $3^0 =$ .... (3 or 0 or 1 or 3 × 0)

ⓕ A statistical question ___ .

(results in a lot of different answers or has an answer of yes or no

or has one answer or results in one number)

ⓖ In each of the bar graphs and histograms, ___ .

(bars are used to represent data or each bar represents an interval

or each bar represents one number or the data is shown above the number line)

Second: **Complete the following:**

ⓐ If 13 X 48 = 624, then 624 ÷ 13 = ___ .

ⓑ All prime numbers are odd numbers, except ___ is an even number.
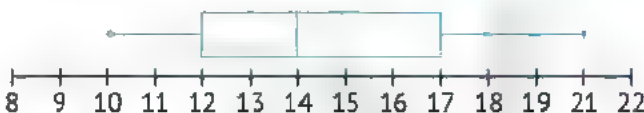
ⓒ The algebraic factor in "2.5x" is ___ .

ⓓ Baher has "m" stickers in the sticker book, then he puts up 12 more stickers, so he has now ___ .

ⓔ The value of the expression "r^2" if (r = 9) is ___ .

f The inequality that represents all values greater than –1 is

g The range for the values " 9, 2, 4, 1, 8, 5" is   .

h The types of statistical data are   data and   data.

Third: Choose the correct answer:

a The integer that expresses the depth of a well of 5 meters is   .

$$(-5 \text{ or } 5 \text{ or } -10 \text{ or } 10)$$

b –6 in the form $\dfrac{a}{b}$ is   . $(-\dfrac{1}{6} \text{ or } -\dfrac{6}{1} \text{ or } \dfrac{1}{6} \text{ or } \dfrac{6}{1})$

c The value of the expression $a^2 + 2 \times 3$ if $a = 3$ is   .

$$(15 \text{ or } 33 \text{ or } 12 \text{ or } 24)$$

d The inequality that represents all values less than or equal to –1 is   .

$$(x > -1 \text{ or } x < -1 \text{ or } x \leqslant -1 \text{ or } x \geqslant -1)$$

e In "$u = 3 \div w$", the independent variable is   . $(w \text{ or } u \text{ or } 3 \text{ or } \dfrac{w}{3})$

f The mean of the values: 45, 15, 40, 70, 80 is   .$(40 \text{ or } 45 \text{ or } 50 \text{ or } 60)$

g The lower quartile of the

values represented using the

opposite box plot is   . $(10 \text{ or } 12 \text{ or } 14 \text{ or } 17)$

Fourth: Answer the following:

1 Find the result:

    a $1,976 \div 8 =$ ....   **b** $9\dfrac{4}{5} - 3\dfrac{1}{2} =$

2 Using the opposite Venn diagram, complete:

    a The two numbers are .... and ....

    b The common prime factors are: .

ⓒ The GCF is .... ⓓ The LCM is .
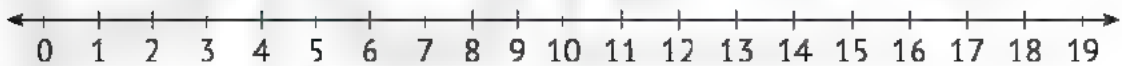
ⓔ Are the two numbers relatively prime? (Yes or No)

3̄ Draw the box plot for each of the following groups of values:

$$3, 8, 7, 2, 10, 12, 9, 2, 10, 9$$

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

4 Use the number line to represent the following inequality:

$x < 5$

-8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8
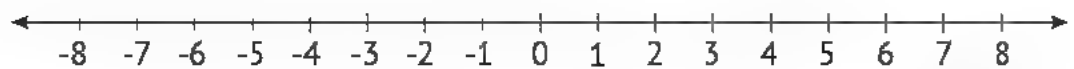
Model

2

First: Choose the correct answer:

(a) The LCM of any two prime numbers is   .

            (1 **or** the smallest number **or** their sum **or** their product)

(b) $6 \times (7 + 5) = $

            ($(6 \times 7) + (6 \times 5)$ **or** $6 \times 7 + 5$ **or** $6 \times 7 \times 5$ **or** $(6 + 7) \times (6 + 5)$)

(c) The algebraic term " $\frac{1}{5}$ x " has   factor(s).   (1 **or** 2 **or** 3 **or** 4)

(d) Ahmed and Tamer have 60 pounds. If Ahmed has x pounds, then Tamer

    has   pounds.   ($60 + x$ **or** $60 - x$ **or** $60x$ **or** $60 \div x$)

(e) $4^2 = $ _____   (4×2 **or** 4×4 **or** $4 \div 2$ **or** $4 + 4$)

(f) _____ are categorical data.

            (Dates of birth **or** Ages **or** Weights **or** Favorite colors)

(g) In each of the bar graphs and histograms,   .

(bars are used to represent data **or** each bar represents an interval

or each bar represents one number **or** the data is shown above the number line)

Second: Complete the following:

(a) If 976 = 61 X 16, then 985 ÷ 61 = 16, and the remainder is   .

(b) _____ is the only prime even number.

(c) The coefficient in the algebraic term "3xy" is   .

(d) Two numbers whose sum is 12, one of which is d, so the other number

    is   .

(e) The value of the expression $3 \times (y^2 - 5)$ if $(y = 3)$ is   .

(f) If $5 = | a |$, then $a = $ _____ or

(g) _____ data is written in the form of numbers.

(h) Range – _____ –

Third: **Choose the correct answer:**

ⓐ All positive numbers .... zero   (< or > or ⩽ or =)

ⓑ | −3.7 | = ...   (3.7 or −3.7 or 37 or −37)

ⓒ If $a + 8 = 15$, then a = ...   (7 or 15 or 8 or 23)

ⓓ The inequality that represents all values to the left of 5 on a number

line is ....   ($x > 5$ or $x < 5$ or $x ⩽ 5$ or $x ⩾ 5$)

ⓔ In $a = 5d$, the dependent variable is ....   (5 or a or d or 5d)

ⓕ If the mean of the values: 12, 15, x, 8 is 10, then the value of "x" is ....

(40 or 5 or 20 or 10)

ⓖ The median of the values represented

using the opposite box plot is ....

30 31 32 33 34 35 36 37 38 38 40

(31 or 32 or 35 or 36)
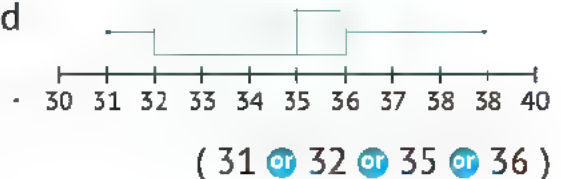
Fourth: **Answer the following:**

① A baker prepared **696** pieces of baklava at a party.

If each tray contains **12** pieces of baklava, how many trays will be needed

to prepare all the baklava?

② Bassem runs **one** kilometer in **20** minutes. Then, the number of kilometers

that Bassem runs in "t" minutes is ....

③ Hazem owns a discount card of **70** pounds. Complete:

ⓐ The equation that represents the relationship between Hazem's

purchases amounted (x) pounds, and the amount to be paid after

the discount (y) pounds is ....

ⓑ If the purchase price before the discount is **560** pounds, then the

required amount is ....

4 Using the following histogram, complete the intervals table:

Intervals	Frequency
0 – 9	
10 – 19	
20 – 29	
30 – 39	
40 – 49	
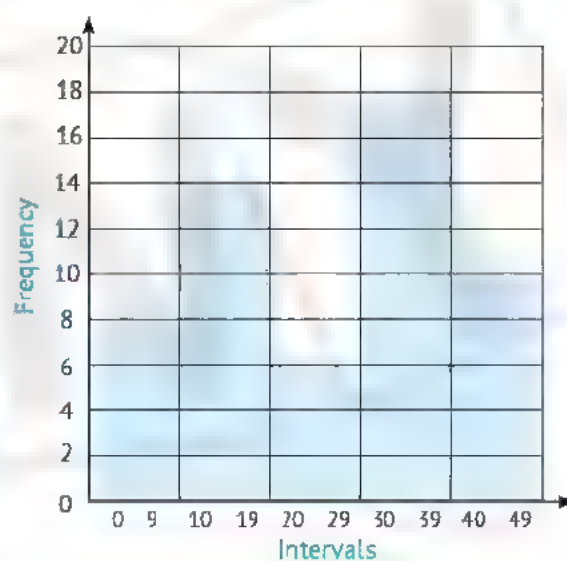
Model

First: **Choose the correct answer:**

a The LCM of any two prime numbers is _____ .

(the smallest number **or** 1 **or** their sum **or** their product)

b $7 \times (2 + 9) =$

($(7 \times 2) + (7 \times 9)$ **or** $7 \times 2 + 9$ **or** $7 \times 2 \times 9$ **or** $(7 + 2) \times (7 + 9)$)

c In the algebraic expression "$3y + 9$", the absolute term is _____ .

(9 **or** 3 **or** y **or** 3y)

d Basem is "x" years old now, how old will he be after 5 years?

($x - 5$ **or** $x + 5$ **or** $5 \div x$ **or** $5x$)

e $5 \times 3 + 2^2 =$ _____ (35 **or** 19 **or** 51 **or** 17)

f _____ are categorical data.

(The number of students in each class **or** Test scores

or The number of family members **or** Favorite TV shows)

g In _____ , there is a graduated scale for the vertical axis.

(the dot plots only **or** the bar graph only

or histogram only **or** both of bar graph and histogram)

Second: **Complete the following:**

a If $2,000 \div 51 = 39$, and the remainder is 11, then $51 \times 39 =$ _____ .

b All natural numbers are also _____ numbers and _____ numbers.

c The number of terms in the algebraic expression $3 \times y - 25$ is _____ .

d The verbal form for the algebraic expression "$5a + 7$" is _____ .

e The algebraic expressions "$2x + 3$" and "$2(x + 1)$" are _____ expressions. (equal or not equal)

f In 5^7, 5 is called _____ and 7 is called _____ .

g "What color are your eyes?" is a _____ question.

h The mean of the values "8, 9, 2, 7, 6, 4" is _____ .

Third: **Choose the correct answer:**

a All negative numbers _____ zero (< **or** = **or** > **or** ≤)

b The opposite of $-\dfrac{3}{4}$ is _____ . ($\dfrac{3}{4}$ **or** $-\dfrac{4}{3}$ **or** $\dfrac{4}{3}$ **or** $1\dfrac{1}{3}$)

c If Hanan saves "d" pounds daily for 5 days, then her father gives her 20 pounds, so the amount that Hanan has now is _____ .

(5 + 20d **or** 20 − 5d **or** 5d + 20 **or** 5 × (d + 20))

d The graph of the inequalities x < 4 and x ≤ 4 on a number line are similar in: _____ .

(4 belongs to both **or** each including all values to the left of 4

or there is a common number between them

or each of them includes all the values to the right of 4)

e In the expression "$y - \dfrac{1}{4} x - 2$", if x − 32, then y − _____ .(0 **or** 2 **or** 6 **or** 30)

f If the sum of 8 values equals 48, then the mean of these values is _____ .

(40 **or** 56 **or** 24 **or** 6)

g The correct description that applies to the opposite graph is that the mean _____ .

14 15 16 17 18 19 20 21 22
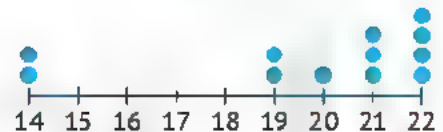
(increases **or** decreases **or** remains the same)

Fourth: **Answer the following:**

1 Find the value of:

a $3^{b} + 6 \times (b^{2} - 3)$ [If b = 2]

= _____

= _____

= _____

b $3 \times 2^{3} \div 12$

= _____

= _____

= _____

2 Omar manufactures hats; he produces 5 hats per day. Write an equation that shows the relationship between the variables x and y and then represent it graphically.

x	2	4	7	9
Y				

The equation:
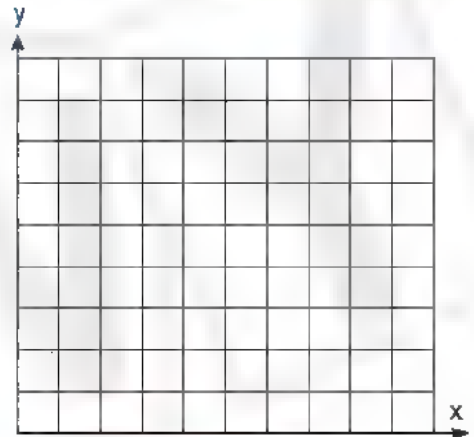
3 Arrange the following group of numbers in an **ascending** order:

$$8 , -17 , |-3| , -9 , |12|$$

Ascending order: ——— , ——— , ——— , ——— , ——— .

4 The following table shows the number of cars violating traffic lights that were detected by surveillance cameras at different time periods. Draw the histogram for this frequency distribution.

Interval in Minutes	Frequency of the Number of cars
10 – 19	6
20 – 29	7
30 – 39	15
40 – 49	8
50 – 59	12

Model

4
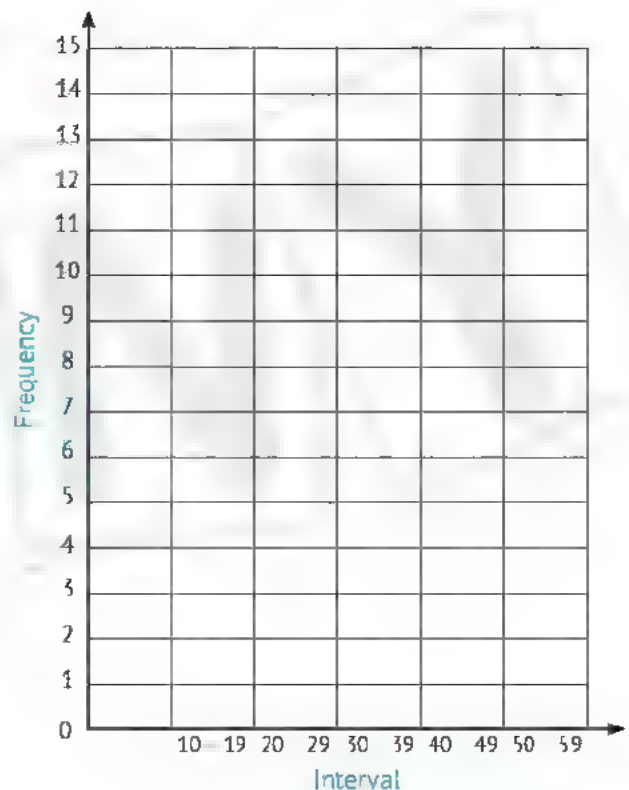
First: **Choose the correct answer:**

a If the prime factors of a number are $2 \times 2 \times 2$, then the number is   .

(8 or 4 or 6 or 222)

b The greatest common factor of any two prime numbers is   .

(the smallest number or 1 or their sum or their product)

c If the height of the school building is m meters and the height of the tree adjacent to this building is 10 meters less than it, then the height of the tree is   meters.   (m + 10 or m − 10 or 10m or $\frac{m}{10}$)

d 3^0 0^3 (< or = or > or ≤)

e If the price of one shirt is 120 pounds, then the price of m number of shirts is   .   (120m or 120 ÷ m or 120 + m or 120 − m)

f The horizontal axis includes numerical periods in   .

(dot plots or bar graphs or double bar graphs or histograms)

g   may be used to display numerical data.

(Dot plots or Bar graphs or Histograms or All of the previous)

Second: **Complete the following:**

a The number that, if divided by 35, the quotient will be 139, and the remainder is 21, is   .

b   × (+   ) = (7 × 2) + (7 × 4)

c If Salah saves z pounds per day, then he saves   pounds in a week.

d Like terms for the algebraic expression "3n + 3 + 2n" are   .

e If $7x = 35$, then the value of x is   .

f In the equation $y = x + 4$, the dependent variable is   .

g   data is written in the form of words.

h The types of pens preferred by the students of your class is a   data.

Third: **Choose the correct answer:**

a The largest non-positive integer is _____ . (−1 or 1 or −100 or 0)

b "0" is a/an _____ number.

(counting or natural or negative integer or odd)

c The inequality representing negative numbers are _____ .

(x > 0 or x < 0 or x ≤ 0 or x ≥ 0)

d The relationship that represents the equation $y = \dfrac{1}{3}x$ is _____ .

(divide by 3 or multiply by 3 or divide by $\dfrac{1}{3}$ or subtract $\dfrac{1}{3}$)

e In $y = 6x + 4$, if $x = 3$, then $y =$ _____ . (10 or 22 or 18 or 67)

f If the sum of a set of values is 36, and the mean of these values is 6, then the number of these values is _____ . (6 or 42 or 30 or 216)

g The _____ will be the best choice as a measure of the central tendency in the opposite graph.
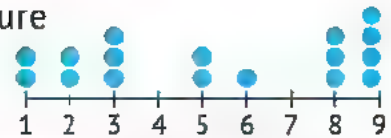
(mean or mode or median or range)

Fourth: **Answer the following:**

1 Mahmoud wanted to divide 28 pens and 42 notebooks into groups so that each group contained the same number of supplies. What is the largest number of groups that can be configured for each type of supply to have the same number in each group? How many pens are in each group? What is the number of notebooks in each group?

_____ = _____

_____ = _____

GCF = _____

2. 15 pounds will be added for the delivery of fast food meals in a restaurant. Complete:

ⓐ The equation that represents the relationship between the price of meals (x) and the amount to be paid including delivery (y) is

ⓑ If the price of the meals is 120 pounds, the required amount is   .

3̲ The following table shows the recorded temperatures in 40 cities in one day. Draw the histogram of the following frequency table.

Interval Temperatures	Frequency of Number of Cities
20 – 21	8
22 – 23	12
24 – 25	9
26 – 27	7
28 – 29	4
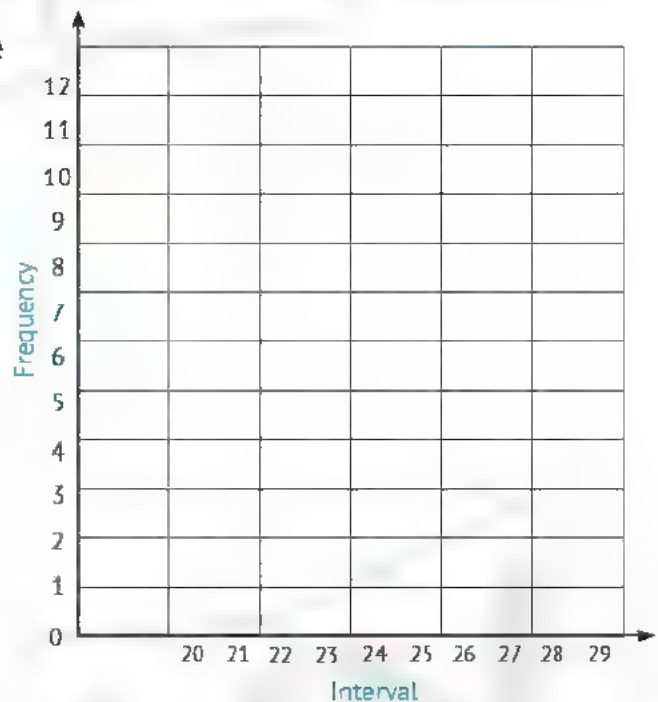
4̲ Find the 5-points summary using the following box plots:
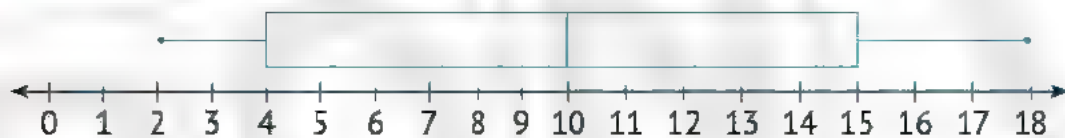
ⓐ Minimum value:

ⓑ Lower quartile:

ⓒ Median:

ⓓ Upper quartile:

ⓔ Maximum value:

Model

First: **Choose the correct answer:**

ⓐ The prime factors of 12 are .(2×6 or 1×12 or 3×4 or $2 \times 2 \times 3$)

ⓑ $2\frac{3}{4} +$ = $5\frac{1}{2}$ ($2\frac{3}{4}$ or $2\frac{1}{2}$ or $3\frac{3}{4}$ or $3\frac{1}{2}$)

ⓒ In the algebraic expression "5b + 6", the absolute term is .

(5 or 5b or 6 or b)

ⓓ The algebraic expression representing: half the difference between the number a and 7 is .

($\frac{1}{2}a - 7$ or $\frac{1}{2}a + 7$ or $\frac{1}{2}(a-7)$ or $\frac{1}{2}(a+7)$)

ⓔ 3^2 _____ 2^3 (< or = or > or ⩽)

ⓕ A .... does not have a vertical axis.

(dot plot or bar graph or double bar graph or histogram)

ⓖ The best graph to represent the number of pupils whose heights range from 150 – 160 cm is a .

(dot plot or bar graph or histogram or box plot)

Second: **Complete the following:**

ⓐ $5 \times (3 + 6) = (\text{........} \times \text{........}) + (\text{........} \times \text{........})$

ⓑ The GCF of the two relatively prime numbers is .

ⓒ Like terms in the algebraic expression 6x + 6y + 2x + 6 are .

ⓓ If the side length of a square is s cm, then the perimeter of the square is ....

ⓔ $8 \times 8 \times 8 = $ ^{3}

ⓕ If 8m = 16, then m = .

ⓖ "Do you like the red color?" is a question.

ⓗ The range cannot be found using .

Third: **Choose the correct answer:**

ⓐ The largest negative integer is ___ .   (–1 **or** 1 **or** –100 **or** 0)

ⓑ "1" is not a/an ___ .

(counting number **or** natural number **or** integer **or** even number)

ⓒ The graph of the inequalities $x > 3$ and $x < 3$ on a number line are similar

in: _____ .   (3 doesn't belong to any of them

or both include all values to the left of 3

or there is a common number between them

or each of them includes all the values to the right of 3)

ⓓ Which of the following values is a solution to the inequality $x \geqslant 5$?

(–5 **or** 4.59 **or** –25 **or** 6)

ⓔ The equation that expresses "multiply by 2 and then add 5" is ___ .

($y – 5x + 2$ **or** $y – 2(x + 5)$ **or** $y – 5(x + 2)$ **or** $y – 2x + 5$)

ⓕ The median of the values: 4, 9, 7, 1, 1, 2 is ___ .   (4 **or** 2 **or** 3 **or** 24)

ⓖ The outliers of the values represented

using the opposite dot plot is ___ .

(2 **or** 7 **or** 3 **or** none)

Fourth: **Answer the following:**

① Find the result:

ⓐ $1{,}440 \div 32 = $ _____   **ⓑ** $4\dfrac{5}{6} – 2\dfrac{1}{2} = $

② If the heights of five pupils in the first preparatory grade in centimeters

are $132, 131, 126, 128, 133$, calculate the mean for these heights.

3 The school has **5** classes for the sixth grade. Complete the following table, where the variable **x** represents the sixth-grade students in the school. Write an equation that shows the relationship between the variables **x** (number of sixth-grade students) and **y** (number of students in each class), and then represent it graphically.

x	150	175	.....	
Y	....	....	40	45

The equation

y

Number of Students in Each Class

50
45
40
35
30
25
20
15
10
5
0

25 50 75 100 125 150 175 200 225   x

Numbe
of Sixth grade Students in the School
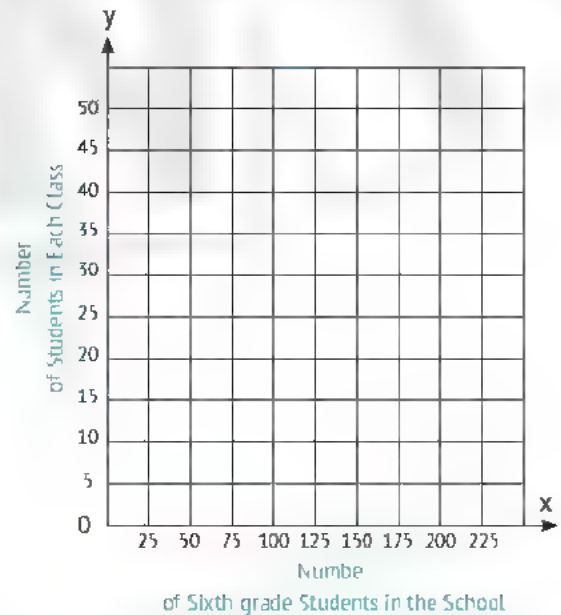
4 Match each of the following situations with the appropriate graph(s):

a Representation of individual values •   • Histogram **1**

b Representation of hundreds of notes •   • Dot Plot **2**

c Representation of data clusters and gaps • in the data   • Box Plot **3**

Model

First: **Choose the correct answer:**

ⓐ The prime number   .   (has no factors **or** has only one factor

                or has only two factors **or** has only three factors)

ⓑ The prime factors of 20 are   .(2×10 **or** 5×4 **or** $2 \times 2 \times 5$ **or** 1×20)

ⓒ Like terms for the algebraic expression "$5 + 5y + 2y$" are   .

                ($5 , 5y$ **or** $5y , 2y$ **or** $5 , 2y$ **or** $5 , 5y , 2y$)

ⓓ The algebraic expression representing: subtract 3 from twice the

number x is ....   ($x - 3$ **or** $2x - 3$ **or** $3x + 2$ **or** $5x$)

ⓔ $4^{......} = 1$ (0 **or** 1 **or** 2 **or** 5)

ⓕ The best graph to represent the number of students absent on Sunday

is   .   (dot plots **or** bar graph **or** histogram **or** box plots)

ⓖ The values "$5, 3, 2, 5, 2, 7$" have   .

             (no mode **or** one mode **or** two modes **or** three modes)

Second: **Complete the following:**

ⓐ $8 \times (\,..... + \,....) = (\,.... \times 9) + (\,......... \times 2)$

ⓑ If $11 \times 27 = 297$, then $297 \div 27 =$.

ⓒ Integers between -3 and 2 are   .

ⓓ The absolute term in the algebraic expression $5b + 3.2$ is   .

ⓔ Six cubed $-$

ⓕ If $a = 3$, then $a + ... = 7$.

ⓖ If the price of books depends on the number of books purchased,

then the independent variable is   .

ⓗ The median of the values "$8, 2, 10, 1, 3, 7, 2$" is   .

Third: **Choose the correct answer:**

a The opposite of 5 is   . $(-4$ or 4 or -6 or $6)$

b "-2.5" is a/an   .

(counting number or natural number or integer or rational number)

c If $y = 6$, then $\dfrac{y}{}$ = 2. $(3$ or 8 or 12 or $4)$

d Which of the following values is a solution to the inequality $x < 9$?

$(10$ or 9.1 or -9.5 or $9)$

e The equation that expresses "subtract from 9" is   .

$(y = x - 9$ or $y = 9 - x$ or $y - x = 9$ or $y = 9x)$

f   use separate columns to represent the data.

(Dot plots or Bar graphs or Double bar graphs or Histograms)

g The median of the values represented

using the opposite dot plot is   .
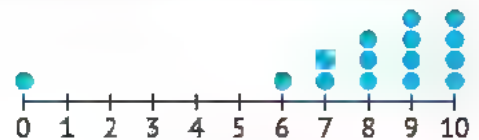
$(15$ or 8 or 10 or $9)$

Fourth: **Answer the following:**

1 Using the opposite Venn diagram, complete:

a The two numbers are ... . and   .

b The common prime factors are   .

c The GCF is ... ...   d The LCM is   .

e Are the two numbers (relatively prime)?   (Yes or No)
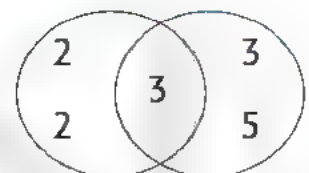
2 Match each number line to the inequality it represents:

a $x < 3$ **1**

          $x \geqslant 3$ **2**

c $x > 3$ **3**

d $x \leqslant 3$ **4**
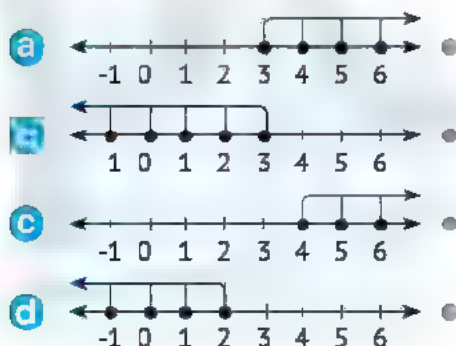
3. Ahmed has $5\frac{3}{4}$ and Tamer has $15\frac{1}{2}$ LE. Find out the total sum of what they have altogether.

4. The following dot plot shows the total points Jalal scored in each basketball game this season. Complete:

Total Points

Points

ⓐ Range: ....   ⓑ Mean:

ⓒ Median: ....   ⓓ Mode:
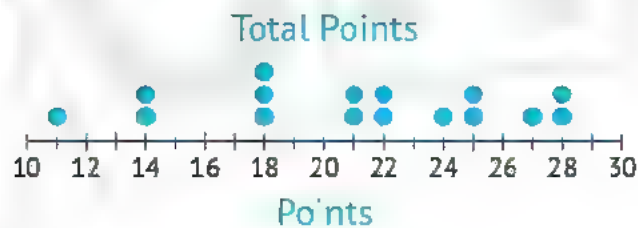
Model 7

First: **Choose the correct answer:**

ⓐ .... is a factor of all numbers. (0 or 1 or 2 or 3)

ⓑ 0, 6, 8, 2 are .... numbers. (even or odd or prime or counting)

ⓒ The number of terms of "5x + 3 y + 2" is .... (2 or 3 or 5 or 6)

ⓓ Like terms for the algebraic expression "2 + 3b + 2a" are ....

(2 , 3b or 2 , 2a or 3b + 2a or none)

ⓔ Ziyad saved up x pounds and his father gave him 10 pounds so that he

would have .... (x – 10 or x + 10 or 10 x or 10 – x)

ⓕ .... have a horizontal axis.

(Bar graphs or Double bar graphs or Histograms or All of the previous)

ⓖ If the mean of Manal and Siham's ages is 7 years, and Manal's age is 6

years, then Siham's age is .... years. (6 or 7 or 8 or 15)

Second: **Complete the following:**

ⓐ | – 0.7 | – ....

ⓑ The LCM of the two relatively prime number is ....

ⓒ The smallest positive integer is ....

ⓓ The algebraic expression that expresses "three times b" is ....

ⓔ If $y – 2 = 9$, then y = ...

ⓕ The inequality that represents all values less than 2 is ....

ⓖ The number of letters of the first name of each student in the class is a

.... data.

ⓗ .... and .... are affected by outliers.

Third: **Choose the correct answer:**

ⓐ _____ is neither a positive nor a negative number. (0 or 1 or –1 or 10)

ⓑ 6 < _____ (–8 or 8 or –9 or –7)

ⓒ $2 \times 2 \times 2 \times 2 \times 2 =$ _____ (2^5 or 5^2 or 2×5 or $2 + 5$)

ⓓ If $5x = 40$, then $x =$ _____ . (35 or 45 or 8 or 200)

ⓔ If the dependent variable is the student's score in the exam, then the independent variable is _____ .

(the type of pen used in the solution or the age of the student

or the number of correct answers or the number of questions in the exam)

ⓕ The range cannot be found using a _____ .

(dot plot or box plot or histogram or bar chart)

ⓖ The mode of the values represented using the opposite dot plot is _____ .
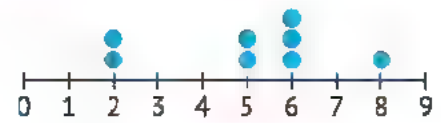
(5 or 6 or 5.5 or 8)

Fourth: **Answer the following:**

1 A road that is 15 km long was paved in three stages; $6\frac{2}{5}$ km was paved in the first stage, and $4\frac{1}{2}$ km was paved in the second stage. How long is the distance paved in the third stage?

2 Find the value of the algebraic expression in each of the following:

ⓐ $g^2 - 16 \div 8$ [If $g = 2$]

= _____

= _____

= _____

ⓑ $3^b + 6 \times (b^2 - 3)$ [If $b = 3$]

= _____

= _____

= _____

3) Draw the histogram of the following distribution, which represents the scores of 50 students.

Intervals	Frequency
10 – 19	8
20 – 29	14
30 – 39	6
40 – 49	18
50 – 59	4
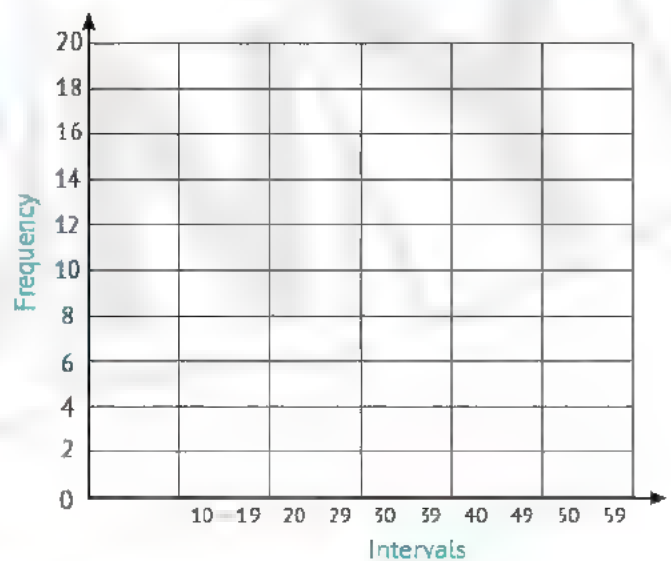
4) Draw a box plot for the following groups of values:

$$5 , 8 , 2 , 7 , 9 , 9 , 2$$

ⓐ Lower Quartile:

ⓑ Median:

ⓒ Upper Quartile:
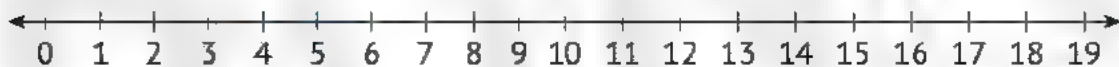
Model

First: **Choose the correct answer:**

(a) _____ ÷ 9 = 15 R 3   (135 **or** 138 **or** 132 **or** 27)

(b) _____ is a prime number.   (55 **or** 11 **or** 22 **or** 33)

(c) The coefficient in the algebraic term " $\frac{3}{8}$ a" is _____ .

         (a **or** 8 **or** 3 **or** $\frac{3}{8}$)

(d) The algebraic term "5ab" is formed from _____ factors.

         (1 **or** 2 **or** 3 **or** 4)

(e) 1^5 = _____ .   (1 × 5 **or** 1 + 5 **or** 1 **or** 0)

(f) If the range of a set of values is 11 and the smallest value is 7, then the largest value is _____   (4 **or** 18 **or** 77 **or** 70)

(g) The mean of the values represented using the opposite dot plot is _____ .

         (14 **or** 6 **or** 7.8 **or** 6.5)

Second: **Complete the following:**

(a) _____ × (4 + 6) = (9 × _____) + (9 × _____)

(b) − 5 , − 4 , − 3 , − 2 , _____ , _____ , _____ ,

(c) The algebraic expression that expresses "adding z to 36" is _____ .

(d) The value of the algebraic expression "4 × (y^3 − 7)", if y = 3 is _____ .

(e) If k = 15, then k ÷ _____ = 5.

(f) In the equation a = 3b, the dependent variable is _____ .

(g) If the mean of the values 3, 4, 9, x, 8 is 6, then the value of x is _____ .

(h) The outliers in the set of values 5, 18, 3, 4, 7, 6 are _____ .

Third: **Choose the correct answer:**

a The opposite of –12 is _____ .   (–12 or 12 or 1 or 2)

b 25 _____ –12   (< or = or > or ≤)

c If $b = 6$, then $b +$ _____ $= 14$.   (10 or 4 or 8 or 6)

d The inequality that represents all values less than or equal to –7 is _____ .

         ($x > -7$ or $x < -7$ or $x ≤ -7$ or $x ≥ -7$)

e If the amount of fuel consumed by the car depends on the distance traveled, then the independent variable is the _____ .

     (fuel amount or distance traveled or traveled time or temperature)

f In the dot plots, _____ (bars are used to represent data or there is no need for a horizontal axis or each information is represented by a point or data is displayed grouped in intervals)

g All the following are measures of the central tendency, except _____ .

     (mean or median or mode or range)

Fourth: **Answer the following:**

1 A school with 795 boys and 521 girls wants to divide the boys and girls equally into 28 classes in the school. How many students will be in each class?

2 Using the mathematical expression "$5x + 2y + 6x + 3$", complete:

a The number of terms of the mathematical expression is _____ .

b Like terms are _____ .

c Coefficients are _____ .

d The absolute term is _____ .

3 The following table shows the number of cars violating traffic lights that were detected by surveillance cameras at different time periods. Draw the histogram for this frequency distribution.

Intervals	Frequency of the Number of Cars
10 – 19	6
20 – 29	7
30 – 39	15
40 – 49	8
50 – 59	12
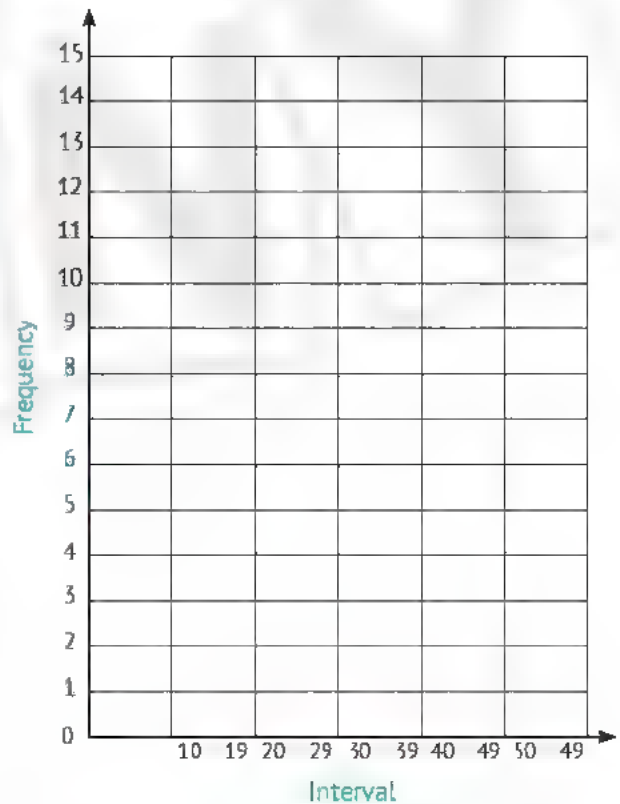
4 The following table represents the temperatures recorded in a city in a week:

Day	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Temperature	22°	25°	30°	25°	23°	22°	21°

Using the values shown in the table, find:

a Mean:

b Median:

c Mode:

d Range:

Model 9

First: **Choose the correct answer:**

(a) If $574 = 41 \times 14$, and $580 \div 41 = 14$, then the remainder is ....

$(-14$ or 41 or 6 or $16)$

(b) .... is a multiple of all numbers. $(0$ or 1 or 2 or $3)$

(c) In the algebraic term "$-3xy$", the coefficient is .... $(y$ or x or 3 or $-3)$

(d) If we subtract 5 from x, the result is ....

$(x + 5$ or $x - 5$ or $5 - x$ or $5x)$

(e) $3^0 = $ ....

$(3$ or 0 or 1 or $3 \times 0)$

(f) In bar graph: (each bar represents a number or one categorical data

or it does not need a vertical axis or the bars must touch

or each piece of information is represented by a dot)

(g) The .... will be the best choice as a measure

of the central tendency in the opposite graph.

(mean or median or mode or mean and median)

Second: **Complete the following:**

(a) The additive inverse of 8 is ....

(b) The rational number $-\dfrac{9}{4}$ in decimal form is ....

(c) Two integers whose sum is s, one of which is 10, then the other number

is ....

(d) Four to the power 5 = ...

(e) If the price of books depends on the number of books purchased, then

the dependent variable is ....

(f) Using the opposite model, the equation is

$X = $ ....

(g) Range = ... −

(h) The mode of the values "9 , 2 , 8 , 3 , 7 , 3" is ....

Third: **Choose the correct answer:**

(a) −9 > ....   (−15 **or** 8 **or** −8 **or** 10)

(b) The number just after − 9 is   .   (−10 **or** −8 **or** 10 **or** 8)

(c) If $a + 8 = 15$, then a =   .   (7 **or** 15 **or** 8 **or** 23)

(d) The inequality that represents all values to the left of 5 on a number line is ....   ($x > 5$ **or** $x < 5$ **or** $x \leqslant 5$ **or** $x \geqslant 5$)

(e) In $a = 5d$, the dependent variable is   .   (5 **or** a **or** d **or** 5d)

(f) .... are categorical data.

(The numbers of students in each class **or** Test scores **or**

The number of family members **or** Favorite TV shows)

(g) The mean of the values: 36, 24, 28, 40, 22 is   .

(40 **or** 45 **or** 50 **or** 30)

Fourth: **Answer the following:**

1) Find the GCF and LCM using the Venn diagram for 24 and 16:
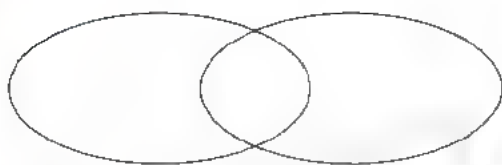
GCF = ...

LCM = ...

24 =

16 =

2) Diaa saves 150 pounds every month. If the amount he saves in (x) months is (y) pounds, then:

(a) The equation that represents this situation is   .

(b) The independent variable is   .

(c) The dependent variable is   .

ⓓ Diaa saves ....in a year.

③ Draw a box plot for the following groups of values:

$$5 , 2 , 9 , 4 , 3 , 6 , 2$$

ⓐ Minimum value:

ⓑ Upper quartile:

ⓒ Lower quartile:

ⓓ Maximum value:

ⓔ Median:

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
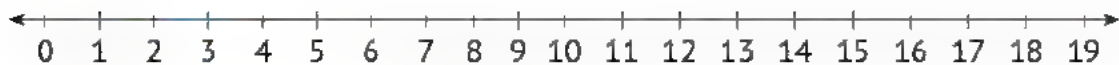
4, Using the following histogram, complete the following interval table:

Interval	Frequency
0 – 19	
20 39	
40 – 59	
60 – 69	
70 – 79	
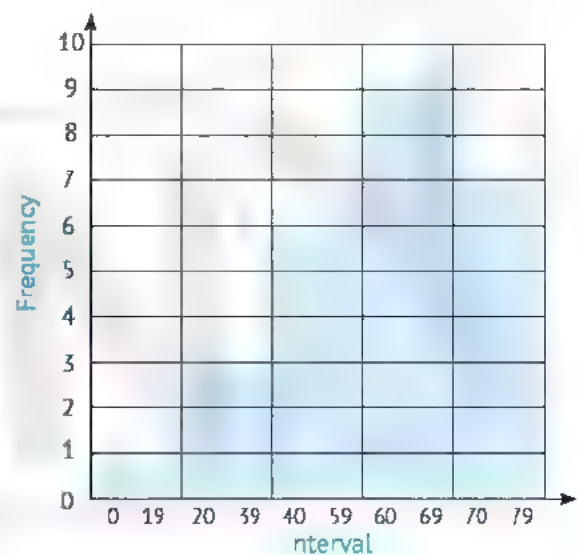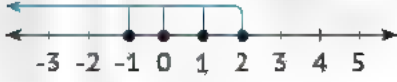
Model

10

First: **Choose the correct answer:**

ⓐ If $12 \times 34 = 408$, then $408 \div 12 =$.   (12 or 34 or 408 or 36)

ⓑ 6 and .... are relatively prime numbers.

(4 or 15 or 35 or 20)

ⓒ The algebraic term "$\frac{1}{5} x$" has   factor(s).   (1 or 2 or 3 or 4)

ⓓ Ahmed and Tamer have 60 pounds, if Ahmed has x pounds, then Tamer

has   pounds.   ($60 + x$ or $60 - x$ or $60 x$ or $60 \div x$)

ⓔ $4^2 =$ ....   (4×2 or 4×4 or $4 + 2$ or $4 + 4$)

ⓕ In the histogram,

(it does not need a vertical axis or the columns must touch

or data is shown above the number line or all bars are evenly spaced)

ⓖ The median of the values: 7, 2, 4, 3, 6, 8 is   .   (4 or 6 or 5 or 10)

Second: **Complete the following:**

ⓐ $8 \times (9 + 2) - (\text{.........} \times 9) + (\text{.........} \times 2)$

ⓑ The number and its opposite are on   from zero, but on two

sides on the number line.

ⓒ The algebraic expression that expresses "5 less than x" is   .

ⓓ $7^3 =$ .... $\times$ .... $\times$

ⓔ The inequality that represents the opposite

model is   .

ⓕ $4^2 \div 2^2 \times 3 =$

ⓖ The mean of the values " 5 , 6 , 4 , 5 , 8 , 2 , 5 " is   .

ⓗ If the range of a set of values is 20 and the smallest value is 8, then the

largest value is   .

Third: Choose the correct answer:

ⓐ "– 3" is located to the right of _____ on the number line.

(–4 or 4 or –2 or 2)

ⓑ An integer between 2 and -2 is _____ .   (–1 or –3 or 3 or –4)

ⓒ The value of the expression $a^2 + 2 \times 3$, if $a = 5$ is _____ .

(15 or 31 or 12 or 24)

ⓓ The inequality that represents all values less than -2 is _____ .

(x > –2 or x < –2 or x ⩽ –2 or x ⩾ –2)

ⓔ In "$u - 3 \div w$", the independent variable is _____ .   (w or u or 3 or $\frac{w}{3}$)

ⓕ The rational number represented on

the opposite number line is _____ .

-8 -7 -6 -5 -4 -3

($4\frac{2}{3}$ or $5\frac{2}{3}$ or $-4\frac{2}{3}$ or $-5\frac{2}{3}$)

ⓖ The range of the values represented

using the opposite box plot is _____ .

0 1 2 3 4 5 6 7 8 9 10

(10 or 2 or 4 or 8)
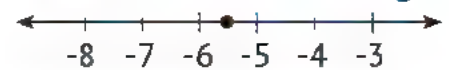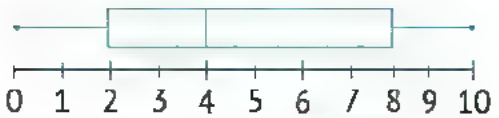
Fourth: Answer the following:

1 A merchant has 16 kg of oranges and 24 kg of apples. If the merchant wants to divide the oranges and apples in bags of the same mass, what is the largest number of bags that can be made for each type of fruit to have the same mass? How many kilograms of oranges will each bag contain? And how many kilograms of apples will each bag contain?

> =
>
> =
>
> GCF =

2 The price of one pen is 9 pounds. Complete :

a The equation that represents the relationship between the number of pens (x) and the purchase price (y) is _____ .

b The independent variable is _____ .

c The dependent variable is _____ .

The price of 6 pens is _____ .

3 The dot plot and histogram below show the exam scores for a number of students in your class?

Exam Scores

Number of Students

Exam Scores
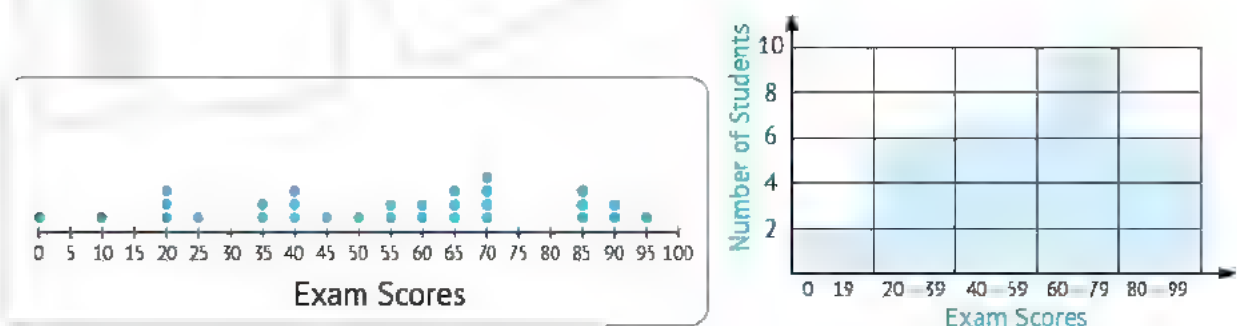
Answer the following, explaining the best graph that helps you in the answer:

a What is the highest grade obtained by the students?

(The answer: _____)   (Best Graph: _____)

b What is the lowest score obtained by the students?

(The answer: _____)   (Best Graph: _____)

c How many students did you score on the drawing?

(The answer: _____)   (Best Graph: _____)

4 Using the equation "$y = 2x + 3$", complete the following table:

x	2	5	9	3	4
Y					

Model Exams

Model (1)

First

- (a) 1
- (b) $4\frac{1}{4}$
- (c) -3
- (d) $x - 5$
- (e) 1
- (f) results in a lot of different answer
- (g) bars are used to represent data

Second

- (a) 48
- (b) 2
- (c) x
- (d) m + 12
- (e) 81
- (f) x > −1
- (g) 8
- (h) numerical, categorical

Third

- (a) −5
- (b) $-\frac{6}{1}$
- (c) 15
- (d) x < −1
- (e) w
- (f) 50
- (g) 12

Fourth

- ① (a) a − 247
- (b) $6\frac{3}{10}$
- ② (a) 10, 21
- (b) none
- (c) 1
- (d) 210
- (e) yes
- ③ Answer by yourself. ④ Answer by yourself.

Model (2)

First

- (a) their product
- (b) (6 × 7) + (6 × 5)
- (c) 2
- (d) 60 − x
- (e) 4 × 4
- (f) Favorite colors
- (g) bars are used to represent data.

Second

- (a) 9
- (b) 2
- (c) 3
- (d) 12 − d
- (e) 12
- (f) 4, −4
- (g) Numerical
- (h) maximum value − minimum value

Third

- (a) >
- (b) 3.7
- (c) 7
- (d) x < 5
- (e) a
- (f) 5
- (g) 35

Fourth

- ① 58 trays
- ② t + 20
- ③ (a) y = x − 70   (b) 490
- ④ 8 , 14 , 6 , 18 , 10

Model (3)

First

- (a) their product
- (b) (7 × 2) + (7 × 9)
- (c) 9
- (d) x + 5
- (e) 19
- (f) Favorite TV shows
- (g) both of bar graph and histogram

Second

- (a) 1,989
- (b) integer - rational
- (c) 2
- (d) multiplying by 5 then add 7
- (e) not equal
- (f) base - exponent
- (g) non statistical
- (h) 6

Third

- (a) <
- (b) $\frac{3}{4}$
- (c) 5d+20
- (d) each including all the values to the left of 4.
- (e) 6
- (f) 6
- (g) decreases

Fourth

- ① (a) 15   (b) 2
- ② 10 , 20 , 35 , 45   y = 5x
- ③ −17, −9, |−3|, 8, |12|
- ④ Draw by yourself.

Model (4)

First

- 8
- 1
- m – 10
- >
- 120 m
- histogram
- All of the previous

Second

- 4,865
- 7,2,4
- 7z
- 3n , 2n
- 5
- y
- Categorical
- categorical

Third

- 0
- natural
- $x < 0$
- divide by 3
- 22
- 6
- mean

Fourth

① 14,2 pen,3 note book
② ○ $y = x + 15$ ○ 135 LE
③ Draw by yourself.
④ ○ 2 ○ 4 ○ 10
   ○ 15 ○ 18

Model (5)

First

- $2 \times 2 \times 3$
- $2\frac{3}{4}$
- 6
- $\frac{1}{2}(a - 7)$
- >
- dot plot
- histogram

Second

- $(5 \times 3) + (5 \times 6)$
- 1
- $6 \times 2x$
- 45
- 8^3
- 2
- non statistical
- histogram

Third

- –1
- even number
- 3 doesn't belong to any of them
- 6
- $y = 2x + 5$
- 3
- none

Fourth

① ○ 45 ○ $2\frac{1}{3}$
② 130
③ x: 200, 225 y: 30, 35
   $y = x + 5$ (Draw by yourself)
④ ○ 2 ○ 3 ○ 1

Model (6)

First

- has only two factors
- $2 \times 2 \times 5$
- 5y ,2y
- 2x –3
- 0
- bar graph
- two modes

Second

- $8 \times (9 + 2) = (8 \times 9) + (8 \times 2)$
- 11
- –2 , –1 , 0 , 1
- 3.2
- 6^3
- 4
- number of books
- 3

Third

- -6
- rational number
- 3
- -9.5
- $y = 9 - x$
- bar graph
- 9

Fourth

① ○ 12,45 ○ 3 ○ 3
   ○ 180 ○ no
② ○ 2 ○ 4
   ○ 3 ○ 1
③ $21\frac{1}{4}$
④ ○ 17 ○ 21
   ○ 21.5 ○ 18

Model (7)

First

- 1
- even
- 3
- none
- x + 10
- All of the previous
- 8

Second

- a) 0.7
- b) their product
- c) 1
- d) 3 b
- e) 11
- f) x < 2
- g) numerical data
- h) mean , range

Third

- a) 0
- b) 8
- c) 2^5
- d) 8
- e) the number of correct answers
- f) histogram
- g) 6

Fourth

1. $15 - (6\frac{2}{5} + 4\frac{1}{2}) = 4\frac{1}{10}$ km
2. a) 2   b) 63
3.
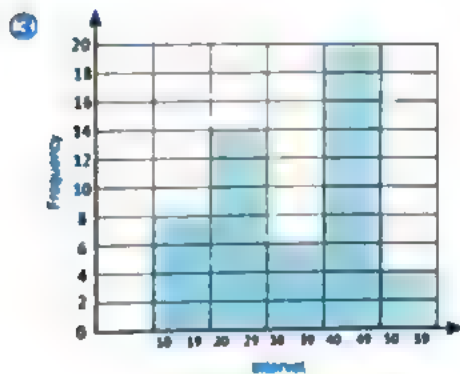
4. a) 2   b) 7   c) 9

Model (8)

First

- a) 138
- b) 11
- c) $\frac{3}{8}$
- d) 3
- e) 1
- f) 18
- g) 6

Second

- a) 9 , 4 , 6
- b) −1 , 0 , 1 , 2
- c) z + 36
- d) 80
- e) 3
- f) a
- g) 6
- h) 18

Third

- a) 12
- b) >
- c) 8
- d) x ≤ −7
- e) distance traveled
- f) each information is represented by a point
- g) range

Fourth

1. (795 ÷ 521) + 28 = 47
2. a) 4   b) 5x , 6x
   c) 5 , 2 , 6   d) 3
3. Draw by yourself.
4. a) 24   b) 23
   c) 22 , 25   d) 9

Model (9)

First

- a) 6
- b) 0
- c) -3
- d) 5 − x
- e) 1
- f) each bar represents a number or categorical
- g) The mean

Second

- a) −8
- b) −2.25
- c) s − 10
- d) 4^5
- e) price of book
- f) x + 1 = 8 , x = 7
- g) maximum value − minimum value
- h) 3

Third

- a) −15
- b) −8
- c) 7
- d) x ≤ 5
- e) a
- f) favorite TV shows
- g) 30

Fourth

1. 8 , 48
2. a) y = 150x   b) x
   c) y   d) 1,800
3. a) 2   b) 6   c) 2
   d) 9   e) 4 (Draw by yourself)
4. 1 , 3 , 6 , 9 , 7

Model (10)

First

a) 34 b) 35 c) 2

d) 60 − x e) 4 × 4

f) the columns must touch g) 5

Second

a) 8 , 8 b) the same distance ,different

c) x − 5 d) 7 × 7 × 7 e) x < 3 or x < 2

f) 12 g) 5 h) 28

Third

a) −4 b) −1 c) 31

d) x < −2 e) w f) −5$\frac{2}{3}$

g) 10

Fourth

① 8 , 2 orange , 3 apples ② a) y = 9x

  b) x number of pen

  c) y total price , 54

③ a) 95 - dot plot b) 0 - dot plot

  c) 30 dot plot

④ 7 , 13 , 21 , 9 , 11

امتحانات رقم (3)

الترم الاول

Prim 6 – Model No ① 1

[01] Choose the correct answer:

(1) The common factor for all number is ....
- a) 0
- b) 1
- c) 2
- d) 3

(2) The remainder of $630 \div 25 = $ ....
- a) 30
- b) 25
- c) 15
- d) 5

(3) $\dfrac{3}{5} - \dfrac{1}{2} = $ ....
- a) $\dfrac{2}{3}$
- b) $\dfrac{1}{5}$
- c) $\dfrac{1}{10}$
- d) $\dfrac{4}{7}$

(4) The coefficient of the algebraic term **4 K** is ....
- a) 1
- b) K
- c) 4
- d) – 4

(5) The outlier of a data set **47 , 45 , 49 , 43 , 125** is ....
- a) 82
- b) 125
- c) 43
- d) 48

(6) The expression which represents (Number Y add to 5) is ....
- a) Y + 5
- b) Y – 5
- c) 5 Y
- d) $\dfrac{Y}{5}$

(7) $-\dfrac{3}{7}$ .... Zero
- a) >
- b) =
- c) <
- d) ≥

[02] Complete the following:

1) $|-7| = $ ....

2) The exponent of 6^2 is ....

3) The additive inverse of the number **11** is ....

4) The constant in the expression: **5 Y + 3** is ....

5) If $Y = X - 5$ and $X = 8$ then $Y = $ ....

6) The mode of (8 , 5 , 3 , 8 , 9 , 4) is ....

7) The number of terms of the expression: **3 a + 2 b + 5** is .... terms

8) The mean of the values (15 , 2 , 10 , 5 , 3) is ....

[03] Choose the correct answer:

(1) The following data are numerical except ....

a) Height   b) Weight   c) Blood type   d) Age

(2) $X > 8$ represent ....

a) Equation   b) Expression   c) Inequality   d) Verbal

(3) The independent variable in relation: $X + 2 = Y$ is ....

a) X   b) Y   c) 2   d) 1

(4) In the opposite box plot
The third quartile is ....

a) 1   b) 2   c) 4   d) 6

(5) 10^3 = ...

a) 10   b) 100   c) 1,000   d) 0.001

(6) The first quartile for the values 42, 35 , 63 , 7 , 28 , 21 , 14 is ....

a) 7   b) 14   c) 35   d) 21

(7) In the opposite histogram:
The interval having the least frequency is ......
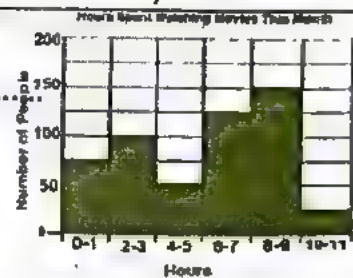
a) $0 - 1$ b) $4 - 5$

c) $8 - 9$ d) $10 - 11$

[4] Answer the following questions:

[A] In the opposite Venn diagram:
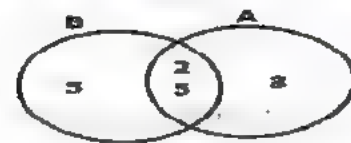
① GCF = ...   ② LCM = ...

[B] In the opposite Box plot:
① The median = ...
② The range = ...

[C] Find the result of: $(10 - 5) + 4 \times 3^2 + 6$

[D] Solve the equation: $X + 2 = 7$

End of the questions

Prim 6 – Model No ② 2

[Q1] Choose the correct answer:

(1) The integer which lies between $\frac{12}{5}$ and $\frac{16}{5}$ is ....

a) 1   b) 2   c) 3   d) 4

(2) The number expressing a gain of 130 pounds on the stock exchange is ....

a) 1   b) −1   c) 130   d) −130

(3) The Quotient of $1650 \div 15 = $ ....

a) 1001   b) 101   c) 1100   d) 110

(4) In equation f5 = b the variable b represents a .... variable

a) Dependent   b) Independent   c) Constant   d) Otherwise

(5) The data type on the horizontal axis of a pie graph chart is data.....

a) Descriptive   b) Numerical   c) Variable   d) Otherwise

(6) Inequality 18 < x2 The value of the variable (x) in which can be ....

a) 7   b) 8   c) 9   d) 10

(7) The mode of values 5, 2, 7, 3, 4 is...........

a) 2   b) 3   c) 4   d) 5

[Q2] Complete the following:

(1) The least common multiple (LCM) of 8 and 24 is ....

(2) The coefficient of the algebraic limit 5 y2 is ....

(3) The inequality representing (B) less than or equal to 5 is ....

(4) A variable whose value does not depend on any other variable is called a .... variable

(5) The arithmetic mean of the values 8, 9, 10 is.....................

(6) The range of the set of values (13, 27, 9, 59, 25 is..

(7) A number whose prime factors are (2, 3, 5) is ....

(8) The favorite hobby of class pupils from statistical data...........

[03] Choose the correct answer:

(1) 3 is the prime factor for ....

a) 12   b) 19   c) 25   d) 16

(2) If : x < Y then : −X ...... − Y

a) <   b) >   c) =   d) Otherwise

(3) The additive natural for $\frac{8}{12}$ is ....

a) $\frac{-3}{6}$ b) $\frac{4}{6}$ c) $\frac{-2}{3}$ d) $\frac{3}{5}$

(4) If : 6 n = 24 , then the value of n is ....

a) 30   b) 24   c) 16   d) 4

(5) All of the following is the quantitive data except ....

a) Hobby   b) Age   c) Weight   d) Length

(6) The previous integer of − 4 is ......

a) 3   b) − 3   c) 5   d) − 5

(7) The constant in the expression 4 x + 3 is ......

a) 4   b) 3   c) 1   d) 7

[04] Answer the following questions:

[A] Eman bought 27 meters of fabric for 1,755 pounds, how much is the price per meter?

....

[B] Find the value of the algebraic expression: (9 + 2b) × 10 when the value of b = zero

....

[C] Arrange the following numbers in descending order | 9 | , 9, | 6 | , 4

....

[D] Consider the corresponding box plot and calculate the following values:

Median = ...

Lower quartile = ...

Upper quartile = ...

max = ...

End of the questions

Prim 6 – Model No ③

[Q1] Choose the correct answer:

(1) The integer lies between 2 and -4 is ....
   a) -5 b) -2 c) 3   d) -6

(2) The A number subtracted from 10 is ....
   a) $A - 10$ b) $A + 10$ c) $10 - A$ d) $10A$

(3) If the quotient 12 and the divisor 15 then the dividend is ......
   a) 12   b) 15   c) 180   d) 27

(4) The range for (2 , 3 , 9 , 7) is ....
   a) 2   b) 7   c) 3   d) 11

(5) The additive inverse of 5^2 is ....
   a) -5 b) -25 c) 25   d) 10

(6) The coefficient in the expression $(3X - 5)$ is .....
   a) 3   b) 5   c) 2   d) 8

(7) If the range 7 and the minimum value 7 ,then The maximum value is ....
   a) 1   b) 49   c) 14   d) 0

[Q2] Complete the following:

(1) GCF for 6 and 9 is .....

(2) $5 + 10^2 \times 2 - 5 =$ ....

(3) The number of like terms in $m2 + m - 7 + 3m$ is ......

(4) $\dfrac{Sum\ of\ all\ values}{number\ of\ theses\ values} =$ ......

(5) Blood type of .... data

(6) If : $b + 4 = 9$ then $3b =$ ....

(7) The mode of (3 , 5 , 7 , 9 , 3) is ......

(8) $270 \div 3 =$ ....

[03] Choose the correct answer:

(1) If $x = |-3|$ then $x = $ ....

a) 2   b) 0   c) 3   d) -3

(2) The remainder of $501 \div 25$ is ......

a) 5   b) 25   c) 1   d) 7

(3) The number whose prime factor is 3 , 3 , 5 is ....

a) 9   b) 15   c) 45   d) 11

(4) If the total score of 5 students is 60 degrees, then the mean = ...

a) 55   b) 300   c) 12   d) 2

(5) -2 .... -6

a) <   b) >   c) =   d) Otherwise

(6) The dependent variable in $2x = 4$ is ......

a) 1   b) 2   c) X   d) 4

(7) All of the following is descriptive data except ....

a) Address   b) Name   c) Date of birth   d) Religion

[04] Answer the following questions:

[A] From the following set of values 7, 5, 3, 2, 3 find the arithmetic

mean=...........   Mode=...........

[B] If the price of the book is 34 pounds, how many books can be purchased for 612 pounds?

[C] Find the solution set of the inequality $(9 \geq x3)$ in the positive integers

[D] The following table represents the temperatures recorded in some cities

Temperature	25-20	30-26	35-31	36-40
Frequency	5	9	2	7

↳ Show data in histogram?

End of the questions

Prim 6 – Model No 4

[01] Choose the correct answer:

(1) The integer number lies between 2 and – 3 is ....
a) 3   b) 2   c) – 3   d) –6

(2) The remainder of $259 \div 5$ is .....
a) 1   b) 2   c) 3   d) 4

(3) The constant in the expression : $5x + 4$ is ....
a) 5   b) X   c) 4   d) 9

(4) $\dfrac{Sum\ of\ all\ values}{number\ of\ theses\ values} = $ ......
a) Mean   b) Median   c) Mode   d) Range

(5) All of the following is prime number except ....
a) 31   b) 19   c) 7   d) 33

(6) The independent variable in the relation : $Y = 3X + 7$
a) Y   b) X   c) 3   d) 7

(7) The median of the values (3 , 1 , 4 , 7 , 5 , 8 , 11) is ....
a) 1   b) 5   c) 8   d) 11

[02] Complete the following:

(1) A prime number whose sum of factors is 20 is ....

(2) The outlier value of the dataset 27, 45, 29, 33, 99 is ....

(3) The largest negative integer is ....

(4) $9189 \div 9 = $ ....

(5) LCM for 5 and 11 is ....

(6) If : $5m = 10$, then $2m + 5 = $ ....

(7) The inequality which represent A is less than or equal 6 is .....

(8) The coefficient of the algebraic expression $3y^2$ is ......

[03] Choose the correct answer:

(1) The next number of − 9 is ....

a) 10   b) − 10   c) 8   d) − 8

(2) The .... is the solution of the equation : $2x − 1 = 11$

a) 2   b) 5   c) 6   d) − 5

(3) ..... is descriptive data .

a) Weight   b) Age   c) Length   d) Favorite color

(4) A frequency distribution with a range of 20 and the smallest value of 25 the largest value = ...

a) 24   b) 5   c) 35   d) 45

(5) The mode of the values (3 , 5 , 7 , 13 , 7 , 3 , 9 , 3) is ....

a) 7   b) 13   c) 3   d) 9

(6) The smallest integer satisfies the inequality : $Y > 5$ is ....

a) 4   b) 10   c) 7   d) 6

(7) $3 + [5 + (3 × 4 − 1)] = $ ....

a) 30   b) 19   c) 17   d) 25

[04] Answer the following questions:

[A] Sarah bought 56 meters of cloth for 4480 pounds, find the price of one meter.

....

[B] Solve the equation: $2X + 3 = 13$

....

[C] Find the value of the expression $(11 + X 2) 10$ when the value of $X = 0$

....
....
....

[D] If the number of weekly flights of a company is 8, 9, 4, 6, 9, 4 or not.

• Median = ... • Arithmetic mean = ...

....

End of the questions

Prim 6 – Model No ⑤

[Q1] Choose the correct answer:

(1) $1512 \div 12 = \ldots\ldots$

a) 126   b) 124   c) 130   d) 140

(2) If : $110 + C = 135$, then the value of C is $\ldots\ldots$

a) 245   b) 30   c) 15   d) 25

(3) In the relation : $y = 3x$, the variable y is $\ldots\ldots$

a) Dependent   b) Independent   c) Constant   d) Mode

(4) The integer number lies between 2 and -3 is $\ldots\ldots$

a) 3   b) 2   c) -3 d) -6

(5) The additive inverse of the number -12 is $\ldots\ldots$

a) 12   b) -13 c) -14 d) 11

(6) The number of variable in the expression : $3a + 2b - c$ is $\ldots\ldots$

a) 5   b) 4   c) 3   d) 1

(7) Maximum value – minimum value = $\ldots\ldots$

a) Mean   b) Mode   c) Median   d) range

[Q2] Complete the following:

(1) $-\left| -\frac{24}{6} \right| = \ldots\ldots$

(2) The coefficient of the term : $\frac{3}{5} b^3$ is $\ldots\ldots$

(3) The inequality which represent (y) is more than or equal 6 is $\ldots\ldots$

(4) $\frac{1}{2} + \frac{4}{5} = \ldots\ldots$

(5) The corresponding box plot of the upper quartile is $\ldots\ldots$

(6) The mean of the values (2 , 3 , 6 , 5 , 4) is $\ldots\ldots$

(7) If : $2x = 32$ then $x = \ldots\ldots$

(8) GCF for 8 and 12 is $\ldots\ldots$

[03] Choose the correct answer:

(1) The Outliers in the data set (32, 31, 33, 34, 5) is ....,

a) 33   b) 31   c) 34   d) 5

(2) $-4 >$ ....

a) -3 b) -2 c) -6 d) 0

(3) $\frac{3}{5} =$ .....

a) $\frac{1}{10}$ b) $\frac{5}{10}$ c) $\frac{3}{10}$ d) $\frac{6}{10}$

(4) X > 4 represent ......

a) Equation   b) Inequality   c) Expression   d) Verbal

(5) The number of terms of the expression : $5x + 3 + m + 1$ is ......

a) 8   b) 4   c) 5   d) 3

(6) All of the following is a numerical data except .....

a) Weight   b) Age   c) School name   d) Length

(7) The mode of the values (1 , 1 , 3 , 5 , 2 , 4) is ....

a) 3   b) 2   c) 5   d) 1

[04] Answer the following questions:

[A] A school with 1120 students, they are intended to be divided into 28 classes equally, how many students are there in each class?

[B] If the number of monthly marks of a student in mathematical exam is 12, 5, 3, 8, 7, 3 and 4.
Find Median , Arithmetic mean ,mode , range

[C] find the solution of the equation : $x + 12 = 30$

[D] find the value of the expression $10 (2x + 5)$ when $x = 2$?

End of the questions

Prim 6 – Model No ⑥

[01] Choose the correct answer:

(1) The LCM of two numbers 18 and 12 is .....

a) 18 b) 20 c) 30 d) 36

(2) $9 \times ..... = (9 \times 7) + (9 \times 6)$

a) 7 b) 117 c) 42 d) 13

(3) The algebraic expression of " divide m by 3 then add 5 " is ....

a) $3m + 5$ b) $\frac{m}{3} + 5$ c) $5m + 3$ d) $\frac{m}{5} + 3$

(4) .... is belongs to the set of natural number

a) 0 b) -2 c) 0.3 d) $\frac{2}{5}$

(5) All of the following are numerical data except ....

a) Age b) Height c) Weight d) Favorite color

(6) The number of terms of the expression : $5x + 7 + n$ is ....

a) 1 b) 3 c) 5 d) 7

(7) The median of the values : 10 , 6 , 4 , 17 is ....

a) 4 b) 6 c) 8 d) 10

[02] Complete the following:

(1) $| -3 | + | -4 | = ...$

(2) The constant in the expression : $3a + 5b + 7$ is .....

(3) The greatest negative integer is ....

(4) If : $b - 2 = 7$ then $b + 2 = ...$

(5) The smallest number which can be added to 254 to make the result divisible by 2 and 5 is ....

(6) The number of terms of $3x + 5y + 7$ is ....

(7) If the sum of 8 values equals 48 , then the mean of these values =

(8) In the equation : $y = 6x + 4$ if $x = 3$ then $y = ...$

[03] Choose the correct answer:

(1) The outlier of the following data set : 90 , 80 , 85 , 87 , 3 and 91 is..

a) 7   b) 80   c) 3   d) 90

(2) In the equation : $x = 5y + 6$ the dependent variable is ......

a) 5   b) 6   c) Y   d) X

(3) The value of the expression : $3x + 5$ when $x = 4$ is .....

a) 7   b) 17   c) 15   d) 10

(4) The number .... is divisible by 2 and 3

a) 1111   b) 552   c) 13   d) 101

(5) The mode of the values 3 , 8 , 1 and 8 is

a) 5   b) 5.5   c) 8   d) 1

(6) The range of the set of values 6 , 5 , 9 , 4 , 11 , 3 and 7 is ...

a) 3   b) 6   c) 9   d) 8

(7) Six square = ...

a) 6^3 b) 2×6 c) 2^6 d) 6^2

[04] Answer the following questions:

[A] Complete the following table according to the equation : $y = x + 5$

X	0	4	8	
y				11

[B] find the result of : $5 \times 3^2 + 8 \div (6 - 4) \div 2$

....

....

[C] Write the algebraic expression to find the area of the opposite figure

....

....

....

5 ⌐────┬────┐
    │   │   │
    └────┴────┘
   10   x
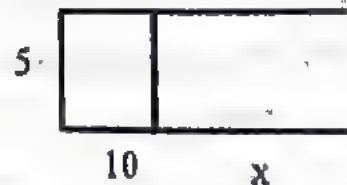
[D] arrange all the following in descending order

$$3.4 \ , - 2\frac{1}{2} , 0 , - 4\frac{3}{7} , 3.24$$

End of the questions

Prim 6 – Model No 7

[01] Choose the correct answer:

(1) 4 .... − 1

  a) =   b) <   c) >   d) Otherwise

(2) The median for the data set : 72 , 64 , 77 , 61 , 79 , 63 , 75 , 76 and 60 is ..

  a) 61   b) 60   c) 72   d) 79

(3) If : $y = 2x + 1$ and $x = 2$ then $y = $ ......

  a) 2   b) 1   c) 4   d) 5

(4) The opposite number for $\dfrac{-1}{3}$ is ....

  a) $\dfrac{1}{3}$ b) 1   c) 3   d) − 3

(5) If $5 \times 5 \times 5 \times 5 = 5^n$ then $n = $ ......

  a) 5   b) 4   c) 1   d) 0

(6) $6 (.... + 2) = 48$

  a) 2   b) 40   c) 6   d) 48

(7) $3 + 5 − 4 + 2^3 = $ ....

  a) 8   b) 4   c) 6   d) 10

[02] Complete the following:

(1) The common multiple of all numbers is ......

(2) $\dfrac{1}{3} + \dfrac{1}{2} = $ ......

(3) The number of integer between − 1 and 1 is .....

(4) $| 0 | = $ ......

(5) $| −2 | \times | 3 | = $ ......

(6) The number of terms of the expression : $3d + 5$ is ......

(7) $(1 , ...)$ satisfies the rule : $y = x + 3$

(8) The integer number between − 1 and 1 is .....

[Q3] Choose the correct answer:

(1) $1\frac{3}{5} + 2\frac{1}{5} = \dots$

a) $3\frac{4}{5}$ b) $3\frac{4}{10}$ c) $1\frac{1}{3}$ d) $1\frac{1}{10}$

(2) The mode od the values : 9 , 3 , 2 , 8 , 3 , 7 is .....

a) 2   b) 7   c) 3   d) 5

(3) The number is divisible by 2 is ....

a) 152   b) 39   c) 13   d) 221

(4) 2.71 belongs to the set of .... numbers

a) Counting   b) Natural   c) Integer   d) Rational

(5) In the equation $y = 3x + 4$ the dependent variable is ......

a) Y   b) X   c) 4   d) 3

(6) The median of the values : 9 , 4 , 3 , 8 , 1 and 10 is .....

a) 6   b) 4   c) 3   d) 1

(7) All of the following is solution of the inequality $x < -1$ except ......

a) -5 b) -4 c) -3 d) zero

[Q4] Answer the following questions:

[A] from the opposite Venn diagram)

$X = \dots$, $Y = \dots$ GCF $= \dots$ LCM $= \dots$
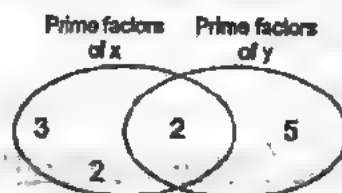
[B] find the result of : $40 + 5(3^2 - 7)$

[C] The following box plot :

Median= ....   range = ...

Q_1=........ Q_2= ....   max= .....   min= ....

[D] Complete the following table, represent it graphically the equation

$y = x + 1$

X	0	2	3
y			

End of the questions

Prim 6 – Model No (8)

[Q1] Choose the correct answer:

(1) All of the following is solutions of the inequality x > 3 except .....

a) – 1   b) 5   c) 9   d) 11

(2) In the expression : 4 x + 7 , the coefficient is ....

a) 4   b) 7   c) 3   d) x

(3) The horizontal axis includes numerical periods in the ....

a) Bar graph   b) Double bar graph   c) Histogram   d) dot plot

(4) 62 = ...

a) 6 × 2   b) 2^6 c) 6 × 6   d) 12

(5) The lower quartile for the set of data : 42 , 35 , 63 , 7 , 28 21 and 14 is .....

a) 14   b) 28   c) 42   d) 63

(6) |– 3 | .... – 4

a) <   b) >   c) =   d) Otherwise

(7) Which of the following are like terms?

a) 3 x and 3y   b) 2x and x^2 c) 3x and 2x   d) X^2 and y^2

[Q2] Complete the following:

(1) the verbal form of : m + 2 is .....

(2) In the opposite Venn diagram , the GCF = ...
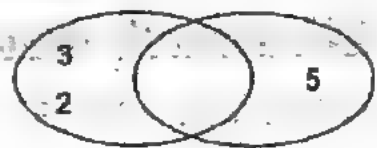
(3) $3\frac{1}{9} + 1\frac{8}{9}$ = ...

(4) The smallest number of the following (0.1 , $-\frac{1}{10}$, 0.7 , – 2.1) is .....

(5) If k + 1 = 5 , then k – 2 = ...

(6) The distance between –3 and 3 on the number line is .... Units.

(7) Max. value – min. value = ...

(8) (2 , ...) satisfies the relation y = 2 x + 3

[03] Choose the correct answer:
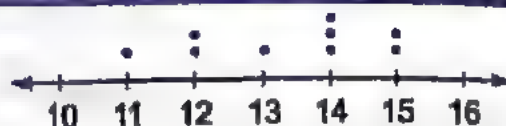
(1) The opposite figure represents the ....
10 11 12 13 14 15 16

  a) Histogram   b) Dot plot   c) Box plot   d) Bar graph

(2) The range of the values : 7 , 10 , 9 , 5 and 4 is ......

  a) 5   b) 6   c) 7   d) 9

(3) 2^3 = ...

  a) 6   b) 2×3 c) 3^2 d) 8

(4) Which of the following is equivalent to $2x + 10$?

  a) $2(x + 5)$ b) $12x$ c) $20x$ d) $2x + 5 + 2$

(5) The outlier of the following values : 5 , 38 , 9 , 7 and 3 is ....

  a) 3   b) 38   c) 5   d) 9

(6) From the opposite histogram:
How many students got more than 50 marks?
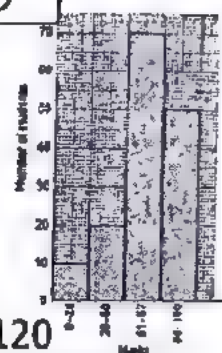
  a) 20   b) 50   c) 70   d) 120

(7) $-3\frac{1}{7}$ .... $-3\frac{1}{4}$

  a) <   b) >   c) =   d) otherwise

[04] Answer the following questions:

[A] Find: $(15 - 9) + 3^2 \times 4$

....

[B] From the following set values: 5, 8, 7, 6 and 4

  Mean = ...   Median = ...

....

[C] Find the value of the expression: $(2x + 3) - 5$ when x = 3

....

[D] Find the GCF and LCM of 20 and 30

....

End of the questions

Prim 6 – Model No 9

[Q1] Choose the correct answer:

(1) $\frac{2}{7} + \frac{3}{7} + \frac{4}{7} + \frac{5}{7} = $ ....

a) 1   b) 2   c) 3   d) 7

(2) The rational number between 0.3 and 0.4 is.......

a) 0.31   b) 0.41   c) 0.25   d) 0.53

(3) " K equal the product of m and 3 " as equation is ....

a) M = 3 k   b) K = m + 3   c) K = m – 3   d) K = 3 m

(4) If $x - 2 = 7$, then $5x = $ .....

a) 5   b) 9   c) 45   d) 35

(5) .... is one of the solution of the inequality $x > 3$.

a) 2   b) 3   c) 4   d) – 5

(6) In the opposite graph,
the balance point is ......
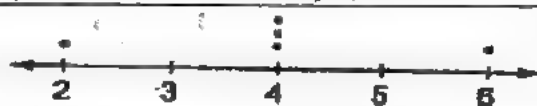
a) 6   b) 5   c) 4   d) 2

(7) The better measure of center tendency is .....

a) Mean   b) Median   c) Either   d) histogram

[Q2] Complete the following:

(1) The number is divisible by 5 if its Ones digit is ....

(2) The common multiple of all number is ....

(3) $| -9 | - | 8 | = $ .....

(4) $(32 + 4) \div 13 = $ ......

(5) The verbal expression of 3 x is ....

(6) The mode of data : 2 , 5 , 2 , 3 , 2 is ....

(7) The constant in the expression : 7x + 5b +6 is .....

(8) $7 \times ($ ..... $ + $ ..... $) = 14 + 21$

[03] Choose the correct answer:

(1) the best subset of $\frac{1}{5}$ is ………. Number

a) A counting   b) A natural   c) An integer   d) A rational

(2) The median of the values : 9 , 4 , 8 , 1 and 3 is ……

a) 4   b) 1   c) 2   d) 3

(3) The number ….. is a one of solution of the inequality $x \leq 4$

a) 10   b) – 6   c) 2   d) 7

(4) The range of the values : 6 , 3 , 9 , 2 and 1 is ……

a) 4   b) 8   c) 2   d) 7

(5) If $x + 2 = 12$ then $\frac{x}{5} =$ ……

a) 10   b) 2   c) 5   d) 14

(6) The independent variable in the equation : $5 m - 3 = k$ is …..

a) k   b) m   c) 5   d) 3

(7) The outlier value of the following data : 91 , 94 , 93 , 5 , 99 and 90 is ……

a) 4   b) 1   c) 5   d) 3

[04] Answer the following questions:

[A] graph the relation $y = x + 5$

[B] $(15 - 9) + 2 \times 3^2$

[C] Solve: $x + 2 = 3$

[D] Draw box plot for the following data: 5 , 7 , 2 , 1 , 2 , 10 , 3

         Median = …..   Q3 = ………

End of the questions

Prim 6 – Model No 10

[01] Choose the correct answer:

(1) 8 ...... − 4

  a) <   b) >   c) =   d) Otherwise

(2) The median of the values : 9 , 4 , 8 , 1 and 3 is .....

  a) 3   b) 4   c) 5   d) 8

(3) $4 \times 4 \times 4 = $ ......

  a) 3×4 b) 3 cubed   c) 4 cubed   d) 3 squared

(4) The number of terms of the expression $8x + 6y + 5$ is ....

  a) 3   b) 8   c) 6   d) 5

(5) If $x + x = 16$ then $x = $ ......

  a) 16   b) 6   c) 1   d) 8

(6) The opposite of 6 is equivalent to .....

  a) 6   b) 0   c) $|-6|$ d) $-\frac{12}{2}$

(7) $5(2x+3) = $ ......

  a) $10x + 3$ b) $5x + 15$ c) $10x + 15$ d) $25x$

[02] Complete the following:

(1) The smallest 3 – digit number divisible by 2 , 5 and 10 is .....

(2) $|-4| = $ ......

(3) The value of the expression $4L - 5 = $ ...... when $L = 3$

(4) The smallest non- negative rational number is ....

(5) $|-1\frac{1}{4}| - |1\frac{1}{4}| = $ ......

(6) $8(5+4) = 40 + $ ....

(7) The type of the statistical data are ....

(8) If $m - 2 = 7$ then $m - 3 = $ ....

[03] Choose the correct answer:

(1) The smallest natural number is ......
a) 0   b) 1   c) 2   d) -1

(2) In the opposite Venn diagram
LCM = ...

a) 2   b) 15   c) 30   d) 10

(3) If 3m = 12 , then m = ...
a) $12 + 3$ b) $12 - 3$ c) 12×3 d) $12 \div 3$

(4) In the equation : y = 3 x + 4 , the dependent variable is ......
a) Y   b) 3   c) X   d) 4

(5) If the mean of the values : m , 2 and 6 is 3 , then m = ...
a) 1   b) 2   c) 3   d) 6

(6) The outlier of the following data : 3 , 5 , 7 , 8 , 31 , 9 is .....
a) 3   b) 9   c) 31   d) 8

(7) Which of the following makes it easier to see the median?
a) Histogram   b) Box plot   c) Dot plot   d) Bar graph

[04] Answer the following questions:

[A] the food bank needs to distribute 116 food boxes.
Is it possible to distribute the boxes equally among 4 villages ?

[B] $5^2 + 8 \div (6 - 2)$

[C] Find the GCF of the numbers : 24 and 18

[D] draw box plot for the values : 7 , 0 , 6 , 2 , 3 , 1 , 9
then find: Q_1 ◆ median

End of the questions

Prim 6 – Model No **11**

[01] Choose the correct answer:

(1) The constant in the algebraic expression : $4x + 5$ is ......

a) 4   b) X   c) 5   d) 4x

(2) $-\dfrac{|-3|}{4}$ .... $\dfrac{1}{10}$

a) <   b) >   c) =   d) Otherwise

(3) The range of the numbers : 19 , 14 , 17 , 9 and 12 is ....

a) 5   b) 9   c) 19   d) 10

(4) 5 cubed = ...

a) 5×3 b) 5^3 c) 3^5 d) $5 + 5 + 5$

(5) The ..... is the value that occur most often

a) Mode   b) Range   c) Median   d) Mean

(6) The LCM of 5 and 10 is ....

a) 5   b) 10   c) 15   d) 50

(7) From the opposite box plot
the upper quartile is .... page 79
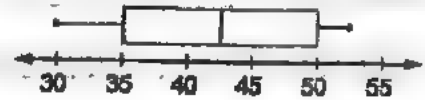
a) 30   b) 35   c) 50   d) 55

[02] Complete the following:

(1) The opposite of − 16 is .....

(2) The GCF of 5 and 8 is ....

(3) $(4 \times 2) + (4 \times 3) = 4 (3 + ...)$

(4) The algebraic expression that represents " take 14 away from a number x " is ....

(5) If $x < 1$ and x belongs to the set of natural , then $x =$ ......

(6) The coefficient in the algebraic expression : $17 + 5 + x$ is .....

(7) The outlier value of these set of data : 1 , 1 , 2 , 3 , 4 and 91 is ....

(8) The mean of the values : 4 , 6 and 5 is ......

[03] Choose the correct answer:

(1) The balance point of the values : 1 , 1 , 3 , 5 and 5 is .....

a) 0   b) 1   c) 3   d) 5

(2) The two expression (2 x + x) and 2 (x + 2) are equal then x = ...

a) 2   b) 0   c) 4   d) 3

(3) If the mode of the values : 0 , 1 , 7 , 5 , x and 4 is 5 then x = ...

a) 1   b) 7   c) 5   d) 4

(4) If $\frac{1}{5} + \frac{1}{3} = \frac{x}{15}$, then x = ...

a) 15   b) 8   c) $\frac{8}{15}$ d) 2

(5) .... is belongs to the solutions of the inequality $x \geq 4$

a) 0   b) -5 c) -4 d) 4

(6) Y is independent variable in the equation ....

a) Y + 4 = x   b) X + 3 = y   c) Y = x + 2   d) 3 x = y

(7) Which of the following are relatively prime numbers?

a) 4 and 6   b) 8 and 15   c) 8 and 18   d) 8 and 24

[04] Answer the following questions:

[A] Evaluate: $9 (p^2 - 20)$ for p = 5

....

[B] solve : x + 8 = 17

....

....

[C] x = ...y = ... GCF = ... LCM = ...

Prime factors of x   Prime factors of y

2   2 3   3

....

....

....
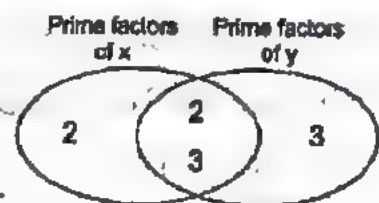
[D] From the opposite box plot

     Median = ...   range = ...

1 2 3 4 5 6 7 8 9 10 11

....
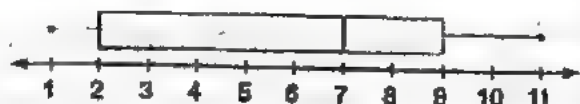
End of the questions

Prim 6 – Model No ⑫

[01] Choose the correct answer:

(1) The number 7 is ....of 35

　　a) Product　　　b) Divisible　　c) multiple　　d) factor

(2) "Y equal 9 added to the number m" , in the algebraic form is ....

　　a) $M = y + 9$　　b) $Y = m + 9$　　c) $Y = 9m$　　d) $M = 9y$

(3) Which of the following is NOT belong to natural numbers ?

　　a) 3　　　b) 0　　　c) 2　　　d) −5

(4) The greatest n0n- positive integer is ....

　　a) 0　　　b) 1　　　c) −1　　　d) 2

(5) 5 squared = ...

　　a) 5　　　b) 15　　　c) 10　　　d) 25

(6) The median of data set : 2 , 10 , 9 , 2 and 7 is .....

　　a) 2　　　b) 9　　　c) 7　　　d) 10

(7) 0 , 1 , 2 are from solutions of the inequality : ....

　　a) $X < 2$　　b) $X \leq 2$　　c) $X \geq 2$　　d) $X > 3$

[02] Complete the following:

(1) .... $\times (6 + 7) = 30 + 35$

(2) If the equation : $y = x + 7$ and $x = 2$, then $y = $ ......

(3) The number whose additive inverse is itself is ....

(4) The expression " subtract h from 3 " is ....

(5) The Q3 of : 7 , 8 , 9 , 3 and 10 is ....

(6) The number whose prime factors are 3 , 3 and 5 is ......

(7) The constant of the expression : $m + 7$ is ......

(8) The mean of the following values is ......

[03] Choose the correct answer:

(1) The GCF of two numbers7 and 8 is .....
a) 1   b) 0   c) 2   d) 3

(2) | – 4 | .... the opposite of (– 4)
a) <   b) >   c) =   d) Otherwise

(3) The independent variable in the equation : $x = 2y + 7$
a) X   b) Y   c) 2   d) 7

(4) The best subset for the number zero is   a / an   .... numbers
a) Counting   b) Rational   c) Integer   d) natural

(5) The coefficient in the expression : $7x + 10$ is ....
a) 3   b) 7   c) 10   d) 1

(6) The mode of data set : 2 , 4 , 5 , 2 , 3 , 5 and 2 is ....
a) 5   b) 3   c) 4   d) 2

(7) The number of terms of the expression : $2k – m + 8$ is .....
a) 2   b) 3   c) 8   d) k

[04] Answer the following questions:

[A] Circle the numbers which are divisible by 2, 3 and 5:
                936, 165, 600, 582 , 330

....

[B] Arrange in a descending order: $(– 8)$, $| – 7 |$, 2 , 0 , $– 3.5$

....
....

[C] Solve the equation: $7 + m = 27.8$

....

[D] Complete the following table then represent it graphically:
     The equation: $y = x + 1$

X	0	1	2
y			

End of the questions

Prim 6 – Model No 13

[Q1] Choose the correct answer:

(1) An integer lies between 2 and − 4 is ....

  a) − 5   b) −2   c) 3   d) −6

(2) If : X+ 120 = 135 then the value of variable X is ....

  a) 53   b) 30   c) 20   d) 15

(3) The number $0.3 =$ .... (in the form of $\frac{a}{b}$)

  a) $\frac{3}{1}$ b) $\frac{10}{3}$ c) $\frac{3}{10}$ d) $-\frac{3}{10}$

(4) The numbers whose prime factors are 5 , 11 is ....

  a) 21   b) 55   c) 16   d) 30

(5) $\dfrac{the\ sum\ of\ all\ values}{number\ of\ these\ values} =$ ....

  a) Median   b) Mean   c) Mode   d) Lower limit

(6) The mode of (1 , 2 , 3 , 4 , 2 , 5) is ....

  a) 3   b) 2   c) 5   d) 1

(7) The rational number which is equal to $\frac{2}{3}$ is ....

  a) $\frac{4}{6}$ b) $\frac{7}{6}$ c) $\frac{1}{6}$ d) $\frac{5}{6}$

[Q2] Complete the following:

(1) The additive inverse of 11.5 is ....

(2) All integers numbers are .... numbers

(3) The mean of (9 , 8 , 5 , 8 , 7) is ....

(4) An integer represent (the temperature degree 7 below zero) is...

(5) The median of (10 , 6 , 4 , 17 , 8) is ....

(6) The mode of (8 , 5 , 3 , 6 , 9 , 4) is ....

(7) The rational number (− 7 .5) lies between − 7 and ....

(8) X > − 1 is called ....

[03] Choose the correct answer:

(1) The number .... is divisible by 6 .

a) 633   b) 236   c) 324   d) 662

(2) The quotient of 7695 ÷ 57 is ....

a) 130   b) 153   c) 135   d) 315

(3) The greatest value − the smallest value = ...

a) Mean   b) Median   c) Mode   d) Range

(4) $\dfrac{1}{1000}, \dfrac{1}{100}, \dfrac{1}{10}$, ...In the same pattern

a) 0   b) 1   c) 10   d) 100

(5) $10 + (5 - 3) \times 2^3 \div 4 = $.........

a) 24   b) 14   c) 11   d) 41

(6) If k is negative which of the following is positive .....

a) K^2 b) K^3 c) $2k$ d) $\dfrac{k}{2}$

(7) If $A + \dfrac{6}{7} = 0$,then A = ...

a) 0   b) 1   c) $\dfrac{6}{7}$ d) $-\dfrac{6}{7}$

[04] Answer the following questions:

[A] If $a = \dfrac{1}{2}$, $b = \dfrac{-3}{2}$, find the value of $(a - b)^3$

....

[B] In the opposite figure : If OA = OB ,find the value of x

....

[C] If $|x \dfrac{1}{2}| = \dfrac{3}{2}$ find the value of x ?

....

[D] complete the following table according to the equation : $y = 2x + 1$

x	0	4	8	10	13
y					

End of the questions

Prim 6 – Model No **14**

[01] Choose the correct answer:

(1) GCF for 6 and 12 is ....

a) 2   b) 3   c) 6   d) 12

(2) The number which satisfies the inequality $| x | > 8$ is ......

a) 7   b) -7 c) -5 d) -9

(3) The coefficient in the expression $5(6-3p)$ is ....

a) 3   b) 5   c) 6   d) 15

(4) If m , 5 are two opposite numbers then their product is ....

a) 25   b) -25 c) 10   d) 0

(5) The mean for the values (7 , 5 , 3 , 8 , 2 , 9 , 1) is ....

a) 3   b) 8   c) 6   d) 4

(6) The independent variable in the equation $y = 4x$

a) Y   b) X   c) 4   d) 4 x

(7) The base of 7^5 is ....

a) 5   b) 7   c) 12   d) 35

[02] Complete the following:

(1) The variable in the equation : $4w + 2 = 35$ is ....

(2) The number which prime factors are 2 , 2 , 3 , 3 is ....

(3) The coefficient in the equation : $3R + 2 = 11$ is ....

(4) The base of 6^2 is .... and its exponent is.....

(5) Each whole number except zero is divisible by ....

(6) If the mean for 5 values is 9 than the sum of these values is ....

(7) If $\frac{7}{y-2}$ is a rational then $y \neq$ .....

(8) The volume of the cube of edge length (2 m) cm is ...... cm^3

[Q3] Choose the correct answer:

(1) All of the following is integer except ....

a) -5 b) 7   c) -11 d) $5\frac{3}{7}$

(2) Which of the following is the smallest ......

a) 8   b) -12 c) 2.6   d) -0.99

(3) The mathematical sentence : $5x + 3y + 6$ is ....

a) Numerical   b) Expression   c) Equation   d) inequality

(4) If : $n + 5 = 12$ then $n =$ ....

a) 6   b) 7   c) 8   d) 17

(5) The G.C.F of two relatively prime numbers is .....

a) 0   b) 1   c) 2   d) 3

(6) LCM for 10 and 21 is ......

a) 21   b) 3   c) 210   d) 7

(7) The additive inverse of 3 .... The additive inverse of 0

a) $<$ b) $>$ c) $=$ d) otherwise

[Q4] Answer the following questions:

[A] Solve the equation : $3X = 6$

....

[B] Find the value of: $3^2 + 12 \div 6 - 3 \times 2$

....

[C] Arrange in the descending order: $-0.7 , -\frac{1}{2} , \frac{3}{4} , \frac{2}{5}$

....

....

[D]   Draw the box plot for the following data.

5 , 9 , 13 , 11 , 2 , 1 , 2 , 14 , 16 , 10 , 3

* min. =
* Q1 =
* median =
* Q3 =
* max. =

Prim 6 – Model No 15

[01] Choose the correct answer:

(1) .... is prime number .

a) 0   b) 1   c) -1   d) 2

(2) $(6+7) \times 9 = 9 \times 6 + 7 \times$ ....

a) 7   b) 9   c) 6   d) 5

(3) The number of integer numbers between 2 , -2 is ....

a) -1   b) -3   c) 3   d) -4

(4) If $X + 2 = 8$ then $\frac{x}{2} =$ ....

a) 3   b) 5   c) 6   d) 10

(5) The number 7.25 is solution to the inequality ....

a) $X < 7$ b) $X < -7$ c) $X \geq 7$ d) $X \leq -7$

(6) The arithmetic mean for the two numbers 3 and 7 is ....

a) 4   b) 5   c) 6   d) 3

(7) (331 + ...)is divisible by 3

a) 0   b) 1   c) 2   d) 3

[02] Complete the following:

(1) If $Y = X - 5$ and $X = 8$ then $Y =$ ....

(2) $\frac{4}{5} + \frac{1}{2} =$ ....

(3) The decimal number 0.25 in the form $\frac{a}{b} =$ ....

(4) The median for the values 4 , 11 , 8 is ....

(5) Statistical data is classified into two types .... , ...

(6) (L C M) for the numbers 7 , 8 is ....

(7) The greatest non positive integer number is ....

(8) If $Y = 8X$ and $X = \frac{1}{2}$ then $Y =$ ....

[03] Choose the correct answer:

(1) The next number immediately to the number -9 = ...

a) -8   b) -10   c) 8   d) 10

(2) If x > 4 then the number ....$\notin$ to the s . s

a) 5   b) 6   c) 7   d) 3

(3) The solution of the equation 2 x + 1 = 13 is ....

a) 5   b) 6   c) 0   d) 2

(4) In The algebraic expression y + 3 + m + 7 the two similar terms are

a) M , y   b) 3 , 7   c) Y , 3   d) 7 , m

(5) If the power is 5 and the base is 4 then the exponential image is ...

a) 5^4 b) 4^4 c) 5^5 d) 4^5

(6) If a rational number $\frac{a}{b}$ = 0 then a = ...

a) 1   b) 2   c) 0   d) 3

(7) If the total score of 5 students in mathematics is 60 then the arithmetic mean is ....

a) 6   b) 5   c) 12   d) 10

[04] Answer the following questions:

[A] A school with 1155 students wants to be distributed equally between 33 classes. What is the number of students in each class?

....

[B] Find the value of the expression 4 = (5^2 – 20)

....

[C] Represents on the number line $3.8 , -3\frac{2}{3} , 1\frac{1}{4} , -2.5$

....

[D] The following table shows the donations of a group of students , such as this data in a frequency histogram

The amount	5	7	9	11	13	15
frequency	10	3	8	4	2	1

How many students donated by 9 pounds or more ?

End of the questions

Prim 6 – Model No 16

[01] Choose the correct answer:

(1) The mode for the values (3 , 5 , 7 , 13 , 3 , 7 , 9 , 3) is ....
a) 7   b) 13   c) 3   d) 9

(2) Which of the following is not natural number ?
a) 0   b) 50   c) – 33   d) 2000

(3) The coefficient of algebraic term 4 Y is ....
a) 2   b) 3   c) 4   d) 5

(4) 4.8 > ....
a) 3.5   b) 8.4   c) 5.2   d) 8

(5) The additive inverse of the 2 is ....
a) 2   b) – 1   c) 0   d) 2

(6) (– 7.8) .... (– 7.9)
a) >   b) =   c) <   d) $\leq$

(7) All the following data are quantitive except ...
a) Name   b) Blood type   c) Color   d) Age

[02] Complete the following:

(1) $3 \times 3 \times 3 = 3$....

(2) If 3 d = 9 then d + 19 = ...

(3) The additive inverse of the number $(-\frac{5}{7})$ is ....

(4) the algebraic expression 9 + 3y – 6n formed from .... terms

(5) LCM for 9 , 18 is ....

(6) The lower value for the values (16 , 10 , 7 , 14 , 11) is ....

(7) The smallest 3- digit number divisible by 3 , 2 and 5 is .....

(8) GCF for (13 , 11) is ......

[03] Choose the correct answer:

(1) the coefficient in algebraic expression $(2f + 8)$ is ....
a) 2   b) 8   c) 1   d) 16

(2) the additive inverse of the number 3 is ....
a) 3   b) -3   c) 2   d) -2

(3) the number + its additive inverse = ...
a) 0   b) 2   c) 3   d) 4

(4) solve of the equation $3x - 1 = 11$, is ......
a) 3   b) 5   c) 6   d) 10

(5) in expression $y + 3 + m + 7$, two like algebraic terms are ....
a) m , y   b) 3 , 7   c) y , 3   d) m , 7

(6) the largest integer satisfies the inequality : $x < 10$ is ......
a) 2   b) 5   c) 9   d) 12

(7) the sum of marks of 5 students in mathematics is 60 , then the mean of their marks is ....
a) 6   b) 5   c) 2   d) 10

[04] Answer the following questions:

[A] Omar wanted to distribute 104 kg of apple among 4 boxes
Is it possible ? and why ?

....

[B] Show that if two following expressions are equivalent or not by using substituting $2(2a + 9)$, $4a + 18$

....

[C] Represent the following numbers on the number line , then arrange them (descend) $(1 , \frac{-5}{2} , 2 , \frac{3}{2} , -1)$

....

[D] look at the opposite box chart
and find the five distinctive values:
1- upper limit   2- lower limit ....   3- (upper quadrant)
4- (lower quadrant   5- median ....

End of the questions

Prim 6 – Model No **17**

[Q1] Choose the correct answer:

(1) The .... Is from the categorical data

a) Height   b) Favorite food   c) Sleeping hour   d) age

(2) The prime factors for the number 12 is ....

a) (2,2,3)   b) (2,2,3)   c) (2,3,5)   d) (3,4)

(3) if x>2 then x+1 ☐ 2

a) >   b) <   c) =   d) otherwise

(4) the number just before -9 is ....

a) -10   b) -8   c) -7   d) -11

(5) side length of square x cm ,then its perimeter = ... cm

a) 4x   b) x+4   c) x^2 d) 2x

(6) the independent variable in relation : x+2=y is ......

a) x   b) y   c) 5   d) x+2

(7) the mode of values 3, 2 ,1 , 2 , 4 is ....

a) 11   b) 2   c) 6   d) 4

[Q2] Complete the following:

(1) lowest common multiple (L.C.M) to 16 , 32 is ....

(2) coefficient of algebraic term $\frac{1}{3} y^2$ is ....

(3) the inequality that represents (a) less than or equal 6 is ....

(4) the variable whose its value not dependent on any variable called ....

(5) in opposite box chart the median is ....

(6) the range of the values (13 , 27 , 8 , 71 , 25) is ....

(7) name of street express .... data .

(8) the number whose prime factors (5 ,3 ,3) is ....

[03] Choose the correct answer:

(1) The median for the values (3 , 9 , 6 , 7 , 5) is ....
a) 5   b) 6   c) 7   d) 9

(2) (GCF) + (LCM) for the numbers 6 and 9 = ...
a) 3   b) 12   c) 18   d) 21

(3) Double of the number 2^{10} is ....
a) 2^{20} b) 2^{11} c) 4^{20} d) 4^{10}

(4) $| -9 | -| -5 | = $ ......
a) $| -5 |$ b) $| -4 |$ c) $-| -4 |$ d) -5

(5) $(8 \div 4)^3 - 2^2 = $ ....
a) 2   b) 0   c) 4   d) 8

(6) the mean of the degree of ...... students is 36 and their sum is 144
a) 5   b) 36   c) 18   d) 72

(7) The number 0 is ..... numbers
a) Natural   b) Integer   c) Rational   d) All of the pervious

[04] Answer the following questions:

[A] write a verbal expression represent the perimeter of rectangle its dimension x cm. and y cm.

[B] A submarine at a depth of 100 meters below sea level and rising 70 meters. Write the appropriate calculation to calculate the new depth of the submarine

[C] Represent the following data with a box plot:

17 , 18 , 16 , 20 , 15 , 18 , 17 , 17 , 16

[D] Arrange the following numbers in a descending order:
$| -8 |, -9, 0, -| 6 |, -(-10)$

End of the questions

Prim 6 – Model No 18

[01] Choose the correct answer:

(1) The integer number lies between $\dfrac{17}{5}$, $\dfrac{22}{5}$ is ....

a) 3   b) 2   c) 4   d) 1

(2) The integer number which represents a loss of 150 L.E is ....

a) –1   b) 150   c) – 150   d) 1

(3) The greatest 2 – digit number divisible by 2 is ......

a) 8   b) 10   c) 100   d) 98

(4) In the equation: $a = 7b$, the variable a express ....

a) Independent   b) Dependent   c) Constant   d) Other wise

(5) Type of data of the horizontal axis for line plot is .... data

a) Descriptive   b) Numerical   c) Variables   d) otherwise

(6) In the inequality $X > 130$, the value of X may be equal .....

a) 100   b) 140   c) 90   d) 80

(7) When add the value 27 to the data (22 , 23 , 21 , 24 , 27) then the mean equal ....

a) 50   b) 24   c) 33   d) 23

[02] Complete the following:

(1) $-\left| -\dfrac{24}{6} \right| = $ ......

(2) The coefficient of an algebraic expression $\dfrac{3}{5}b^3$ is ....

(3) The inequality which represents Y is more than of equal 6 ....

(4) The integer numbers lies between $\dfrac{9}{4}$, $\dfrac{24}{5}$ is ....

(5) In the opposite box plot, the upper quartile is ....

(6) The mean for the values (4 , 5 , 6 , 3 , 2) is ....

(7) We can determine the mean on the graph by ....

(8) The G.C. F for 16 , 28 is ....

[03] Choose the correct answer:

(1) The numbers with only common factor is one is called ....
a) Relatively prime b) Composite c) Odd d) Even

(2) A color box contains **16** pens, price each one **4** pounds, what the price of the box? The suitable operation to solve this problem is
a) Addition b) Subtraction c) Multiply d) Division

(3) LCM for 5 , 8 is ....
a) 1 b) 5 c) 8 d) 40

(4) The reminder of $527 \div 5$ is ....
a) 2 b) 3 c) 4 d) 0

(5) The number -7 lies on the right of .... On the number line
a) -3 b) 0 c) 1 d) -1

(6) $-(-3) =$ ....
a) b) c) d)

(7) The count number is ....
a) Integer b) Natural c) Rational d) All the pervious

[04] Answer the following questions:

[A] A factory for children games collected 22200 a toy car in 12 hours, how many toy car are collected in one hour?

....

[B] Find the mean, median m mode , range and outlier value for the following data : (4 , 3 , 7 , 8 , 3 , 5 , 12)

....

[C] Represent the following numbers on the number line and arrange it ascending: $(2 , -\frac{1}{4} , -3 , \frac{3}{4} , -2)$

[D] What is the number of players which tall is more than 1.7 m?

....
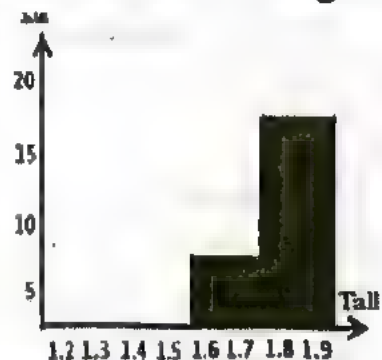
End of the questions

امتحانات رقم (4)

الترم الاول

Answer the following Questions :

Q(1) Choose the correct answer

(1) The greatest negative integer is ....

(A) -1 (B) -10 (C) -100 (D) -1000

(2) $10^3 =$ ....

(A) 30 (B) 300 (C) 100 (D) 1000

(3) The number -18 belongs to ...... to both sets

(A) natural and integers (B) Counting and integers

(C) Integers and natural (D) Natural and rational

(4) From numerical data......

(A) height (B) Job (C) blood type (D) Favorite color

(5) Which of the following represents two similar algebraic terms?

(A) $3m, 3k$ (B) x, y (C) $5c, 5b$ (D) $x, 3x$

(6) The arithmetic mean of the values 2, 7, 3, 8, 10 is ....

(A) 2 (B) 3 (C) 6 (D) 7

(7) In the box chart, if the minimum = 3, and the maximum = 11, then the range = ...

(A) 3 (B) 8 (C) 11 (D) 14

Q(2) complete the following

(1) $\frac{-3}{5}$ belongs to set of ....numbers

(2) The (G.C.F) of the two numbers 4,8 is ....

(3) $\frac{2}{5} + \frac{1}{4} = \cdots$

(4) The number of terms of the algebraic expression $5x + 3y + 8$ is....

(5) The median of the values 2, 7, 3, 5 is.....

(6) If x is an independent variable and y is a dependent variable, then the equation that expresses the rule (multiplying by 8) is _____.

(7) From the box diagram in the corresponding figure, the median =...

(8) The negative integer that represents the solution to the inequality $x > -2$ is ....
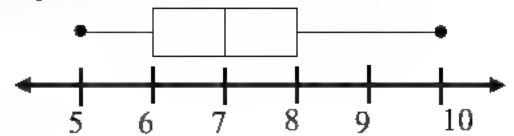
Q(3) Choose the correct answer

(1) From the opposite figure the value of x=....

Ⓐ	4	Ⓑ	3
Ⓒ	2	Ⓓ	1
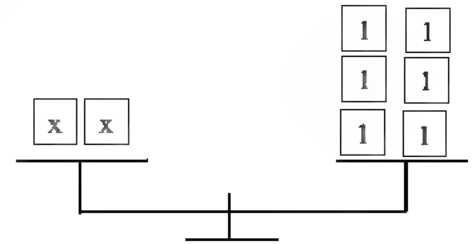
(2) The median of the values 5, 9, 2, 7, 4 is ....

Ⓐ	5	Ⓑ	6	Ⓒ	7	Ⓓ	8

(3) The mode of the values 4, 7, 5, 3, 7, 9 is...

Ⓐ	5	Ⓑ	6	Ⓒ	7	Ⓓ	8

(4) The algebraic expression 5 (1+x) is equivalent to the algebraic expression...

Ⓐ	5x	Ⓑ	5x+1	Ⓒ	5x+5	Ⓓ	5+x

(5) $\dfrac{-3}{4}$ .... $\dfrac{-2}{5}$

Ⓐ	<	Ⓑ	>	Ⓒ	=	Ⓓ	≤

(6) If $X = |-5|$, then X=.......

Ⓐ	5	Ⓑ	-5	Ⓒ	-10	Ⓓ	0

(7) In the Venn diagram, the least common multiple of the numbers 20 and 30 is...

Ⓐ	60	Ⓑ	40
Ⓒ	30	Ⓓ	10

Factors of 30   Factors of 20
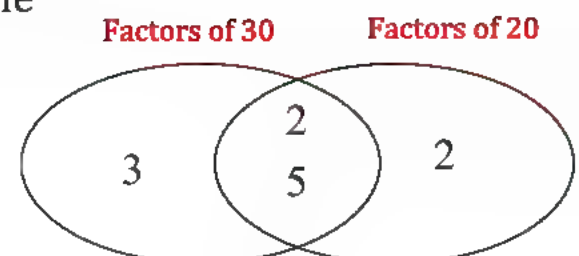
Q(4)

(1) Find the result of $60 - (17 + 15) \div 2^2$

(2) Write four solutions of the following inequality
in the set of integers $m > 5$

(3) If x is an independent variable and y is a dependent variable, write the
equation that expresses the rule (Multiply by 3, then add 5)
Then find the value of y at (x = 4)

(4) The following table shows the grades obtained by some
students in mathematics

Marks	12	14	16	18	19	20
Frequency	2	4	3	2	1	2

(a) Represented the data by a histogram with an interval length of 3

(b) How many students got 17 marks and more?

Q₁ : Choose the correct answer : (7 × 1 = 7 marks):

1) $|-8| - |2|$ = ...

(a) 82 (b) 6 (c) 10 (d) 16

2) $- 10$ ☐ $- 2$

(a) > (b) = (c) < (d) otherwise

3) The best subset for the fraction $\dfrac{1}{5}$ is .... number .

(a) Counting (b) Integer (c) Natural (d) Rational

4) In equation $y = 2x + 10$ the constant is ....

(a) 10 (b) x (c) y (d) 2

5) The value of : $m^2 + 2$, for $m = 3$ is ....

(a) 35 (b) 9 (c) 11 (d) 7

6) The opposite of the number $- 3$ is ....

(a) 0 (b) 1 (c) 2 (d) 3

7) The smallest counting number is ....

(a) 0 (b) 1 (c) 2 (d) - 1

$$\frac{}{7}$$

Questions	Q₁	Q₂	Q₃	Q₄	Q₅
Marker					
Reviser					

$$\frac{}{30}$$

(1)

Q₂ : Complete each the following : (8 × 1 = 8) marks:

8) $7 (5 + 3) =$ …….. + ………

9) $\dfrac{1}{8} + \dfrac{1}{4}$ = ……..

10)   If : $2x = 12$, then $x + 1 =$ ………..

11)   In the equation : $y = x + 2$ the dependent variable is …..…….

12)   The verbal form of $3k = 12$ is ……….....

13)   In $126 \div 25 = 5 R 1$, the divisor is ……….

14)   The mode of the opposite figure is ……….

14)   1 2 3 4 5 6 7

15)   The mean of the values : 3 , 5 , 4 , 7 and 6 is ……..

$$\frac{}{8}$$
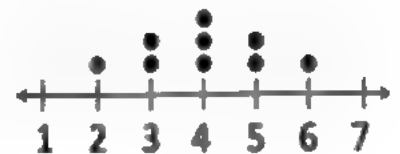
غير مصرح بكتابة أية إجابات في هذه الجزء

Q₃ : Choose the correct answer: (7 × 1 = 7 marks):

16) Add k to the number 3 is ……...

(a) $k + 3$ (b) $3k$ (c) $k - 3$ (d) $k \div 3$

17) The number ……..… is a solution of $x \leq 4$

(a) 5   (b) 1   (c) 6   (d) 12

18) The median of the values : 9 , 4 , 8 , 1 , 3 is ……......

(a) 1   (b) 3   (c) 4   (d) 8

19) The range of set of values : 9 , 4 , 1 , 3 and 5 is ……………

(a) 4   (b) 6   (c) 10   (d) 8

20) The outlier of the following values : 1 , 4 , 52 , 3 , 7 is ……...

(a) 52   (b) 1   (c) 3   (d) 7

21) $9 \times 9 \times 9 \times 9 = 9^{……}$

(a) 2   (b) 3   (c) 4   (d) 36

22) The balance point in the opposite figure is ……………

(a) 3   (b) 4   (c) 5   (d) 6

Q4:23) Evaluate the expression :   (2× 2 = 4 marks):

$$(3^2 - 5) + 7 \times 2$$

$$\boxed{\dfrac{}{4}}$$

....

....

....

24) if : $y = 2x + 1$, find the value of y for $x = 5$?

....

....

....

Q5:25) Using the venn diagram to complete : (2× 2 = 4 marks):

a) The two numbers are :

   a = ...   ,   b = ...

    a   b

     2   3   5

b) G.C.F. for two numbers is ....

c) L.C.M. for two numbers is ....

26) Using the box plot to complete :

    4   5   6   7   8   9   10   11

a) The minimum value is   ....

b) The range is   ....

c) The median is   ....

d) The Lower quartile is ....

$$\boxed{\dfrac{}{4}}$$

(4)

Q₁ : Choose the correct answer : $(7 \times 1 = 7 \text{ marks})$:

1) $|-8| - |2| = \dots\dots$

(a) 82   **(b) 6**   (c) 10   (d) 16

2) $-10 \boxed{} -2$

(a) >   (b) =   **(c) <**   (d) otherwise

3) The best subset for the fraction $\dfrac{1}{5}$ is $\dots\dots$ number .

(a) Counting   (b) Integer   (c) Natural   **(d) Rational**

4) In equation $y = 2x + 10$ the constant is $\dots$

(a) 10   (b) x   (c) y   (d) 2

5) The value of : $m^2 + 2$, for $m = 3$ is $\dots$

(a) 35   (b) 9   **(c) 11**   (d) 7

6) The opposite of the number -3 is $\dots\dots$

(a) 0   (b) 1   (c) 2   **(d) 3**

7) The smallest counting number is $\dots$

(a) 0   **(b) 1**   (c) 2   (d) -1

$\dfrac{}{7}$

Questions	Q₁	Q₂	Q₃	Q₄	Q₅
Marker					
Reviser					

$\dfrac{}{30}$

Q₂ : Complete each the following : (8 × 1 = 8) marks:

8) 7 (5 + 3) = 35 + 21 = 56

9) $\frac{1}{8} + \frac{1}{4}$ = $\frac{1}{8} + \frac{2}{8} = \frac{3}{8}$

10) If : 2x = 12 , then x + 1 = 6 + 1 = 7

11) In the equation : y = x + 2 the dependent variable is ...y...

12) The verbal form of   3k = 12   is ..three times of k equals to 12

13) In   126 ÷ 25 = 5 R 1 , the divisor is ..25...

14) The mode of the opposite figure is ...4...

1 2 3 4 5 6 7

15) The mean of the values : 3 , 5 , 4 , 7 and 6 is ...5...

$\frac{3 + 5 + 4 + 7 + 6}{5} = 5$

$\boxed{\dfrac{\ }{8}}$

Q₃ : Choose the correct answer: (7 × 1 = 7 marks):

16) Add k to the number 3 is ....

(a) k + 3   (b) 3k   (c) k − 3   (d) k ÷ 3

17) The number .... is a solution of $x \leq 4$

(a) 5   (b) 1   (c) 6   (d) 12

18) The median of the values : 9 , 4 , 8 , 1 , 3 is ....

(a) 1   (b) 3   (c) 4   (d) 8

19) The range of set of values : 9 , 4 , 1 , 3 and 5 is ....

(a) 4   (b) 6   (c) 10   (d) 8

20) The outlier of the following values : 1 , 4 , 52 , 3 , 7 is ....

(a) 52   (b) 1   (c) 3   (d) 7

21) $9 \times 9 \times 9 \times 9 = 9^{.....}$

(a) 2   (b) 3   (c) 4   (d) 36

22) The balance point in the opposite figure is ....

(a) 3   (b) 4   (c) 5   (d) 6

$\boxed{\dfrac{}{7}}$

Q₄:23) Evaluate the expression :   (2× 2 = 4 marks):

$$(3^2 - 5) + 7 \times 2$$

= (9 - 5) + 7 × 2

= 4 + 14 = 18

24) if : y = 2x + 1 , find the value of y for x = 5 ?

y = 2 × 5 + 1

= 11

Q₅:25)Using the venn diagram to complete : (2× 2 = 4 marks):

a) The two numbers are :

a = 6 , b = 15

b) G.C.F. for two numbers is 3

c) L.C.M. for two numbers is 2 × 3 × 5 = 30

26) Using the box plot to complete :
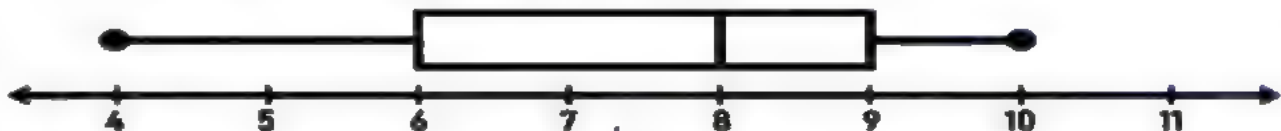
a) The minimum value is 4

b) The range is 10 - 4 = 6

c) The median is 8

d) The Lower quartile is 6

(4)

امتحانات رقم (5)

الترم الاول

6ᵗʰ Primary Revision

Model (1)

First : choose:

1) the set of integers ……………. the set of rational numbers

a) belongs to   b) does not blong to

c) is a subset of   d) is not a subset of

2) 6280 ÷ 25 = ……………

a) 215 R 5   b) 251 R 5   c) 251   d) 255 R 1

3) $\frac{-1}{2}$ …………… zero

a) <   b) >   c) ≥   d) ≤

4) the range of the values : 5 , 9 , 10 , 7 and 4 is …………

a) 5   b) 6   c) 7   d) 10

5) the lower quartile for the set of data : 23 , 21 , 17 , 18 , 20 and 19 is ………...

a) 17   b) 18   c) 19   d) 20

6) in the equation : $y = \frac{1}{4} x$, if the input is 12 , then the output is ……….

a) 48   b) 3   c) $12\frac{1}{4}$ d) $11\frac{3}{4}$

7) 10 less a number written as ………………

a) x -10   b) 10 – x   c) 10 + x   d) x + 10

second: complete:

1) (3 , ……..) satisfies the rule : 2x + 1

2) the coefficient in algebraic expression : 4n + 2 - 6n is …………………

3) subtracting 3 from double a number = …………………..

4) 14 + 21 = 7 x (………… + ………)

5) the integer which just before -12 is ………………

6) the number of integers between -5 and 3 is …………..

7) if k + 1 = 5 , then k – 2 = …………….

8) the range of the set of data : 10 , 19 , 5 , 7 and 3 is …………

third : choose:

1)) From the opposite venn diagram, the expression is ………………..

      a.   10(6 + 35)   b.   3(10 + 7)

      c.   7(10 + 3)   d.   10(3 + 7)

2) $8 - 4 \div 2 \times 3 = $ ………..

a) 3   b) 2   c) $\frac{4}{6}$ d) $5\frac{1}{3}$

3) the number of terms of the expression 5x + 3y – 1 is …………

a) 3   b) -1   c) 1   d) 5

4) number of solution of the inequality x < -2 is …………..

a) - 3   b) -1   c) 0   d) infinite

5) $3 \times 3 \times 3 = $ ………………

a) 3cubed   b) 3 squared   c) 3^4 d) 3

6) the ibdependet variable in the equation : 5x + 3 = y is………..

a) 3   b) x   c) 5   d) y

7) the smallest non- negative number is ……………..

a) 1   b) -1   c) zero   d) -20

fourth : answer the following:

1) complete the following table , then represent graphically.

The equation : y = 2x + 1

X	0	1	2
Y			
(x , y)			

2) find the G.C.F and L.C.M of 36 and 24 by using venn- diagram

....

....

....

....

3) find three eational number between $\frac{3}{4}$ and $\frac{4}{5}$

....

....

....

4) the following table shows the daily wages of 50 workers of a company>

Sets	120 – 129	130 – 139	140 – 149	150 – 159	160 – 169
Frequency	8	10	16	12	4

Draw the histogram for this distribution.

Model (2)

First : choose:

1) take away twice the number k from 15 written as ……………..

   a) 2k – 15   b) 15 – 2k   c) k – 2   d) k – 15

2) All the following are solutions of the inequality m< -3 except ……….

   a) -6   b) -10   c) -2   d) -5

3) The best subset of -3.5 is …………………
a) counting   b) natural   c) rational   d) integer

4) The additive inverse of 35 ……………… set of natural numbers
a) belongs   b) does not belong   c) subset   d) not subset

5) the mode of the set of data 100 , 105 , 100 , 103 , 105 and 100 is ……….
a) 100   b) 105   c) 103   d) 101

6) the median of the set of values: 109 , 90 , 114 , 120 , 97 , 104 , 93 , 98 , 127 , 94 …..
a) 98   b) 101   c) 104   d) 107

7) the gratest negative number is ………………
a) -1   b) -10   c) -2   d) -5

second: complete:

1) the absolute values of opposites are ……………..

2) the integers between -5 and 1 are ……………………………….

3) the constant in the expression 3y + 2x – 5 is ……………..

4) the value of : $5h^2$ (6 – 4) at h ………………………………………….

5) if x + x + x = 12 , then x = …………………..

6) the number ……….. is neither positive nor negative .

7) $-3\frac{1}{6}$ in the form of $\frac{a}{b}$ is …………………..

8) The distance between 2 and its opposite is ……………

third : choose:

1) the algebraic expression of subtract 3 from k is……………..
    a) 3- k   b) k-3   c) k + 3   d) 3k

2) 20 + 25 = 5 (……………. + 5)

a) 4   b) 5   c) 20   d) 25

3) in the rule : y = x + 4 , if x = 1 , then y would be …………..
a) 3   b) 5   c) 4   d) 2

4) the cube of 6 = …………………..
a) 3 ×6   b) 3 + 6   c) 6^3 d) 3^6

5) the G.C.F of two relatively prime numbers is ……………
a)   0   b) 1   c)   2   d) 3

6) the upper quaetile for the set of data : 100 , 101 , 103 , 97 , 98 ,99 and 102 is ………………
a) 103   b) 102   c) 98   d) 100

7) which display makes it easier to see the median ?
a) dot plot   b) box plot
 c) histogram   d) bar graph

<u>fourth : answer the following:</u>

1) name 3 solutions of each inequality , then graph on number line >

- $m \geq -1$

....

....

2) order operation to find the value of : $2 \times 5 + (6^2 - 24 \div 2)$

....

....

....

....

3) evaluate the expression : $5 x^2 + 8 \div (6 - 4) \div 2$ at x = 3

....

....

....

....

4) find mean , mode , medians and outliers for the set of data :
   1 , 1 , 2 , 3 , 5 , 12

Mean = ...

Mode = ...

Meadian = ...

Outliers = ...

6th Primary Revision

Model (1)

First : choose:

1) The set of integers …………….. the set of rational numbers

a) belongs to

b) does not belong to

c) is a subset of

d) is not a subset of

2) $6280 \div 25 =$ ……………

a) 215 R 5   b) 251 R 5   c) 251   d) 255 R 1

3) $\dfrac{-1}{2}$ ………….. zero

a) <   b) >   c) ≥   d) ≤

4) The range of the values: 5 , 9 , 10 , 7 and 4 is …………

a) 5   b) 6   c) 7   d) 10

5) The lower quartile for the set of data : 23 , 21 , 17 , 18 , 20 and 19 is ………

a) 17   b) 18   c) 19   d) 20

6) in the equation : $y = \dfrac{1}{4} x$, if the input is 12 , then the output is ……….

a) 48   b) 3   c) $12\dfrac{1}{4}$ d) $11\dfrac{3}{4}$

7) 10 less a number written as ……………

a) x -10   b) 10 − x   c) 10 + x   d) x + 10

second: complete:

1) (3 , …7…) satisfies the rule : 2x + 1

2) The coefficient in algebraic expression: 4n + 2 - 6n is ……4 and -6…………

3) Subtracting 3 from double a number = ...2x - 3 ....

4) 14 + 21 = 7 x (...2...... + ...3...)

5) The integer which just before -12 is ...... -13 ......

6) The number of integers between -5 and 3 is ...-4 ,-3, -2 , -1 , 0 , 1 , 2 = 7

7) If k + 1 = 5 , then k − 2 = ...2....

8) The range of the set of data : 10 , 19 , 5 , 7 and 3 is ...16...

<u>third : choose:</u>

1) From the opposite Venn diagram, the expression is ....
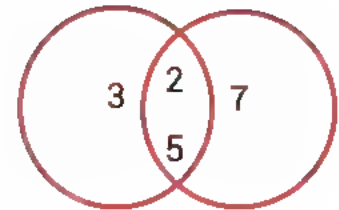
      a.   10(6 + 35)   b. 3(10 + 7)

      c.   7(10 + 3)   d. 10(3 + 7)

2) $8 - 4 \div 2 \times 3 =$ ....

a) 3   b) 2   c) $\frac{4}{6}$ d) $5\frac{1}{3}$

3) The number of terms of the expression 5x + 3y − 1 is ....

a) 3   b) -1   c) 1   d) 5

4) Number of solution of the inequality x < -2 is ....

a) - 3   b) -1   c) 0   d) infinite

5) $3 \times 3 \times 3 =$ ....

a) 3cubed   b) 3 squared   c) 3^4 d) 3

6) The independent variable in the equation: 5x + 3 = y is...........

a) 3   b) x   c) 5   d) y

7) The smallest non- negative number is ....

a) 1   b) -1   c) zero   d) -20

fourth : answer the following:

1) complete the following table , then represent graphically.

The equation : y = 2x + 1

X	0	1	2
Y	1	3	5
(x , y)	(0 , 1)	(1 , 3)	(2, 5)

2) Find the G.C.F and L.C.M of 36 and 24 by using Venn- diagram

36 = 2 x 2 x 3 x 3

24 = 2 x 2 x 3 x   2

G.C.F = 2 x2 x 3 = 12

LCM = 2 x2 x 3 x 3 x 2 = 72

3) Find three rational number between $\frac{3}{4}$ and $\frac{4}{5}$

$\frac{61}{80}$, $\frac{62}{80}$, $\frac{63}{80}$ (answers may vary)

4) the following table shows the daily wages of 50 workers of a company>

Sets	120 − 129	130 − 139	140 − 149	150 − 159	160 − 169
Frequency	8	10	16	12	4

Draw the histogram for this distribution.

Model (2)

First : choose:

1) Take away twice the number k from 15 written as ……………

    a) 2k – 15   b) 15 – 2k   c) k – 2   d) k – 15

2) All the following are solutions of the inequality m< -3 except ……….

    a) -6   b) -10   c) -2   d) -5

3) The best subset of -3.5 is …………………
a) Counting   b) natural   c) rational   d) integer

4) The additive inverse of 35 …………… set of natural numbers
a) belongs   b) does not belong c) subset   d) not subset

5) The mode of the set of data 100 , 105 , 100 , 103 , 105 and 100 is ……….
a) 100   b) 105   c) 103   d) 101

6) the median of the set of values: 109 , 90 , 114 , 120 , 97 , 104 , 93 , 98 , 127 , 94

a) 98   b) 101   c) 104   d) 107

7) The greatest negative number is ……………

a) -1   b) -10   c) -2   d) -5

second: complete:

1) The absolute values of opposites are …equal…..

2) The integers between -5 and 1 are ……-4 , -3 , -2 , -1 , 0 = 5

3) The constant in the expression 3y + 2x − 5 is …… - 5 .

4) The value of : $5h^2$ (6 − 4) at h =3 ………………90……………….

5) If x + x + x = 12 , then x = ……4……..

6) The number …zero ….. is neither positive nor negative .

7) $-3\frac{1}{6}$ in the form of $\frac{a}{b}$ is ………-$\frac{19}{6}$…..

8) The distance between 2 and its opposite is ……4……

third : choose:

1) The algebraic expression of subtract 3 from k is……………

a) 3- k   b) k - 3   c) k + 3   d) 3k

2) 20 + 25 = 5 (…………… + 5)

a) 4   b) 5   c) 20   d) 25

3) In the rule: y = x + 4 , if x = 1 , then y would be …………

a) 3   b) **5**   c) 4   d) 2

4) The cube of 6 = ...
a) 3 ×6   b) 3 + 6   c) **6^3**   d) 3^6

5) The G.C.F of two relatively prime numbers is ....
a) 0   b) **1**   c) 2   d) 3

6) The upper quartile for the set of data: 100 , 101 , 103 , 97 , 98 ,99 and 102 is

a) 103   b) **102**   c) 98   d) 100

7) Which display makes it easier to see the median?
a) dot plot   b) **box plot**
c) histogram   d) bar graph

fourth : answer the following:

1) Name 3 solutions of each inequality, then graph on number line

- $m \geq -1$

m = **-1 , 0 , 1**

2) Order operation to find the value of : $2 \times 5 + (6^2 - 24 \div 2)$
$2 \times 5 + (36 - 24 \div 2)$
$2 \times 5 + (36 - 12)$
$2 \times 5 + 24$
$10 + 24 = 34$

3) evaluate the expression: $5x^2 + 8 \div (6-4) \div 2$ at $x = 3$

$$5(3)^2 + 8 \div (6-4) \div 2$$

$$5(9) + 8 \div 2 \div 2$$

$$45 + 4 \div 2$$

$$45 + 2 = 47$$

4) Find mean, mode , medians and outliers for the set of data :

1 , 1 , 2 , 3 , 5 , 12

Mean = ...4..

Mode = ...1..

Median = ...2.5...

Outliers = ...12...

امتحانات رقم (6)

الترم الاول

Choose the correct answer

(1) In the opposite Venn diagram, the value of x is ………………

Ⓐ 2   Ⓑ 30   Ⓒ 6   Ⓓ 10

Prime factors of x   Prime factors of y   3   2   5

(2) The median of the values 9 , 4 , 8 , 1 and 3 is …..

Ⓐ 3   Ⓑ 4   Ⓒ 5   Ⓓ 8

(3) Eight squared = ……………………

Ⓐ 2 × 8   Ⓑ 8 + 2   Ⓒ 8^2 Ⓓ 8÷2

(4) the range of the set of values 9 , 4 , 6 , 1 , 7 is ……………

Ⓐ 9   Ⓑ 8   Ⓒ 7   Ⓓ 6

(5) The best subset of the number 0 is ……

Ⓐ Rational number   Ⓑ integer   Ⓒ natural number   Ⓓ counting number

(6) Which of the following in not a solution of N > 1.5 ?

Ⓐ 2.5   Ⓑ 2   Ⓒ 1.9   Ⓓ 1.5

(7) – – – ………………………–

Ⓐ >   Ⓑ <   Ⓒ =   Ⓓ

(8) 3 × 3 × 3 ×3 = ……………

Ⓐ 3 × 4   Ⓑ 3 cubed   Ⓒ 3 squared   Ⓓ 3^4

(9) Which algebraic expression is equivalent to 10 x + 15 ?

Ⓐ 5 (2x + 3)   Ⓑ 5 (5x + 10)   Ⓒ 15 x + 10   Ⓓ 2x+3

(10) – ……………0.5

Ⓐ >   Ⓑ <   Ⓒ =   Ⓓ

(11) 48 + ……………………………… = 16 (……………+ 2)

Ⓐ 32 , 3   Ⓑ 2 , 3   Ⓒ 16 , 3   Ⓓ 2 ,16

(12) From the box plot ◄— 9 10 11 12 13 14 15 16 17 —► the upper quartile is ………………

Ⓐ 9   Ⓑ 10   Ⓒ 13   Ⓓ 16

(13) The mode of 7 , 9 , 7 , 8 , 7 , 6 , 7 and 10 is …………………..

Ⓐ 7   Ⓑ 8   Ⓒ 9   Ⓓ 10

(14) The like terms in the expression: 1 + 5a + 5b + 2 are …………………..

Ⓐ 5a and 5 b   Ⓑ 1 and 2   Ⓒ 5 and 5   Ⓓ 5 and 2

(15) – 4 …………….. 0

Ⓐ >   Ⓑ <   Ⓒ =   Ⓓ

10 The first operation you perform in the expression : $3 + 5 - 4 + 2 \times 3^2$ is ....

(A) Subtract   (B) add   (C) multiply   (D) exponent

Complete the following

- The L.C.M of 4 and 12 is ....
- The verbal form of " m + 0.7 " is ....
- From the opposite dot plot , the mean equals ....
- In the equation : $y = 3x + 1$, if $x = 4$, then y would be ....
- $|4| \times |-4| =$ ....
- The range = ... — ....
- $9 \times 9 \times 9 \times 9 = 9$ ⎯
- The smallest counting number is ....
- The smallest solution of the inequality $\geq$ -1 is ....
- $- - - =$ ....
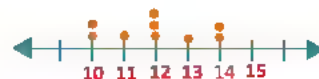
Answer the following questions

- In the pond , – of the lilies are white and – of lilies are pink . the remaining lilies are blue what is the fraction of the blue lilies ?
  ....
  ....

- Eslam needs 300 L.E to buy pants . he does not have enough money .
  Find three possible amounts of money eslam has .
  ....
  ....

- The following table shows the marks of a group of students in an exam .

marks	1	2	4	5	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Number of students	2	1	3	1	1	3	1	2	1	1	4	2	5	2	2	3	2	4

  - Use suitable intervals to draw a frequency table
  - Represents the frequency table using histogram

- Find the G.C.F of the following numbers using Venn diagram
  7 and 12

  ....
  ....

- Youssef collected data on the number of hours that spend on internet daily from the students of his class and data are shown below :

  6 , 6.5 , 5 , 7 , 4.5 , 5.5 , 3 , 4 , 4 , 5 , 3.5 , 5 , 3.5 , 4.5 , 6

  Using an appropriate scale on the number line to construct a box plot.

  ....
  ....

M R / A H M E D - T A W F I K

TEST

Choose the correct answer

1 If $y = 7 + 3x$, then (............, 10) satisfies the equation .

Ⓐ 1   Ⓑ 0   Ⓒ 2   Ⓓ 4

2 The number of rational numbers lying between — and its opposite is ....

Ⓐ 0   Ⓑ 1   Ⓒ 2   Ⓓ an infinite number

3 Which of the following is not numerical expression?

Ⓐ $5x + 3$ Ⓑ $5^2 + 4$ Ⓒ $3 - 1^2$ Ⓓ $3 \times 5 + 1$

4 ....+ ....= 12 (5 + 1)

Ⓐ 17 , 13   Ⓑ 60 , 12   Ⓒ 60 , 1   Ⓓ 5 , 12

5 $24{,}495 \div 71 = 345$ R ....

Ⓐ 0   Ⓑ 1   Ⓒ 2   Ⓓ 3

6 If $x - 3 = 5$, then $-x =$ ....

Ⓐ 8   Ⓑ 4   Ⓒ 16   Ⓓ 1

7 The mean of the data set (9 , 19 , 12 , 10) is ....

Ⓐ 10   Ⓑ 12   Ⓒ 12.5   Ⓓ 15.5

8 $\left|\ -\ \right|$ 3.12

Ⓐ >   Ⓑ <   Ⓒ =

9 The inequality that represented by the opposite Number line in the set integers is ....

Ⓐ $X > 2$ Ⓑ $x \geq 2$ Ⓒ $x \leq 2$ Ⓓ $x < 2$

10 The best subset for the number - 2 is ....

Ⓐ A Counting number   Ⓑ an integer   Ⓒ a natural number   Ⓓ a rational number

11 – — = ...

Ⓐ –   Ⓑ —   Ⓒ —   Ⓓ —

12 The G.C.F of 10 and 8 is ....

Ⓐ 2   Ⓑ 18   Ⓒ 40   Ⓓ 80

13 The number of terms of the expression $5x + 3y - 1$

Ⓐ 5   Ⓑ 3   Ⓒ -1   Ⓓ 1

14 The better measure of central tendency for The following data set is ....

Ⓐ Mean   Ⓑ Median   Ⓒ Either

15 Number of solutions of inequality $x < -2$ is ....

Ⓐ – 3   Ⓑ – 1   Ⓒ 0   Ⓓ infinite

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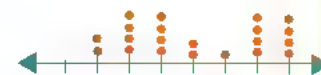
16 " q is six times p add to 12 " in equation is ....

(A) q = 6 p − 12   (B) q = 6 p + 12   (C) p = 6 q + 12   (D) p = 6 q − 12

17 10 − 3 − = ...

(A) 7 −   (B) 6 −   (C) 7 −   (D) 6 −

Complete the following :

In the equation: y = x + 3 , if x = 6 , then y would be ....

The types of statistical questions are .... and ....

$\left| - \quad \right| + \left| 1^{3} \right|$ = ...

4,250 ÷ 12 = ...

In the equation: y = x + , if the input is 2 , then the output is ....

In the opposite dot plot the balance point is ....

The constant in the expression: 5x + 2 is ....

8 − 3 × 2 ÷ (4 − 2) =.........................

Answer the following questions :

A merchant paid 7,420 L.E to buy 53 boxes mango .
Find the price of each box ,and if each box contains
5 kg . of mango , so find the price of each kg .
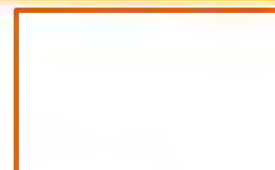
Order the given set of numbers from least to greatest.

2.1 , 1.4 , −3 − , −1 − , −2 −

Least				Greatest
....	....	....	....	....

Write algebraic expression to find the area of the opposite figure.

....
....
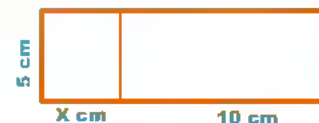
Youssef read at least 4 books .

Use b > to find three possible numbers of books that Youssef read .

....
....

Order the given set of numbers from greatest to least . using table like the one shown

3.4 , −2− , 0 , −4 − , 3 −

Greatest				Last
....	....	....	....	....

TEST **3**

Choose the correct answer

1. 10 − 3 = ...
- Ⓐ 7
- Ⓑ 6
- Ⓒ 7
- Ⓓ 6

2. Each number in the set of integers is called ....
- Ⓐ Element
- Ⓑ set
- Ⓒ subset
- Ⓓ not subset

3. The integer which comes just before − 3 is
- Ⓐ −2
- Ⓑ − 4
- Ⓒ − 1
- Ⓓ 0

4. $|{-3}| + |4|$ = ...
- Ⓐ 1
- Ⓑ − 7
- Ⓒ 7
- Ⓓ 12

5. The balanced point of the set of data which is represents by the opposite dot plot is ....
- Ⓐ 12
- Ⓑ 13
- Ⓒ 14
- Ⓓ 15

6. $(1.5 \div 0.5)^2 + 9 - 4$ = ...
- Ⓐ 14
- Ⓑ 18
- Ⓒ 9
- Ⓓ 11

7. Which display makes it easier to see the median?
- Ⓐ Histogram
- Ⓑ box plot
- Ⓒ dot plot
- Ⓓ bar graph

8. 3.8 > ....
- Ⓐ 4.1
- Ⓑ 5
- Ⓒ − 6.8
- Ⓓ 8.9

9. 8 + 24 = 8 (.................... + 3)
- Ⓐ 1
- Ⓑ 2
- Ⓒ 3
- Ⓓ 4

10. A school has 2,800 students which distributed between 48 classes equally. How many students are in each class?
- Ⓐ 60
- Ⓑ 50
- Ⓒ 40
- Ⓓ 70

11. All the following numbers are rational except ....
- Ⓐ 1
- Ⓑ −
- Ⓒ ——
- Ⓓ ——

12. The number of integers between − 5 and 2 is ....
- Ⓐ 6
- Ⓑ 5
- Ⓒ − 3
- Ⓓ 7

13. In the equation : y = 2 x + 1 , the ordered pair (2 , a) satisfies the equation , then a = ...
- Ⓐ 5
- Ⓑ −
- Ⓒ 23
- Ⓓ 6

14. The set of counting numbers .... the set of rational numbers .
- Ⓐ Belongs
- Ⓑ does not belong
- Ⓒ is a subset of
- Ⓓ is not a subset of

15. All the following expressions are equivalent except ....
- Ⓐ
- Ⓑ 2 [2x + 4]
- Ⓒ 4 [x + 4]
- Ⓓ 2 [x + 2]

(16) | 34| < ....
  (A) 1.4   (B) − 1.29   (C) − 1.4   (D) 1.19

(17) If x + x = 12 , then x = ...
  (A) 1   (B) 21   (C) 6   (D) 24

Complete the following :

- The word phrase for the equation " m = 4L " is ....
- The box plot shows the data for the average weights
  Of some students, then the upper quartile=...............

20 25 30 35 40 45

- The verbal form of " 2x + 1 " is ....
- 8 (5+4) = 40 + ...
- In the equation: $y = x + 3$, if x = 6 , then y would be ....
- The types of statistical questions are .... and ....
- The values of the expression: x + 5 for x = 4 is ....
- If m − 2 = 7 , then m + 1 = ...
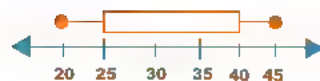
Answer the following questions :

● Solve each of the following equations .

  A. 5 t = 20   B. 7 + z = 17.8

....

....

● Write an equation use the variable x and y , where x is the independent , write the equation " multiply by 8 and add 3 " , substitute x = − to evaluate y .

....

....

● Using the following Venn diagram, complete.

- the two numbers represented in the venn diagram are ....and ....
- The G.C.F of the two numbers is ....
- The L.C.M of the two numbers is ....

● Are the two numbers relatively prime numbers?

3
3   5   7

Choose the correct answer

1) $25 + 60 = \ldots\ldots\ldots (5 + 12)$

Ⓐ 1   Ⓑ 5   Ⓒ 12   Ⓓ 60

2) The opposite of 5 is ....

Ⓐ 5   Ⓑ 0   Ⓒ -5 Ⓓ 10

3) Which box plot represents the data set :

$$8 , 8 , 9 , 11 , 12 , 13 , 13 , 14 , 15 , 15 , 16 , 17 , 18 , 18 , 24$$

5) $8 - 4 \div 2 \times 3 = \ldots\ldots\ldots\ldots$

Ⓐ 5   Ⓑ 3   Ⓒ 2   Ⓓ
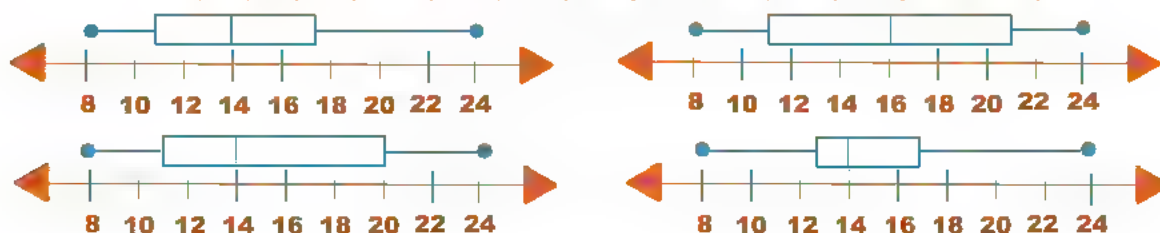
6) In the expression: $2a + 5 + a + 1$, which of the following is not true ?

Ⓐ 2 and 5 are constant .   Ⓑ 5 and 1 are constant

Ⓒ 2 and 1 are coefficient.   Ⓓ $2a$ and a are like terms .

7) $4 - 3 = \ldots\ldots\ldots\ldots$

Ⓐ 1   Ⓑ   Ⓒ   Ⓓ 1

8) A number is no more than 8 can be written as ....

Ⓐ N   8   Ⓑ $n < 8$ Ⓒ $n > 8$ Ⓓ n   8

9) Seven squared add to 5 equals ....

Ⓐ $7^2 + 5$ Ⓑ $2^7 + 5$ Ⓒ $7 \times 2 \times 5$ Ⓓ $7 + 2^5$

10) " 5 less d equals L " in equation is ....

Ⓐ $d - 5 = L$ Ⓑ $5 - d = L$ Ⓒ $5 - L = d$ Ⓓ $5 d = L$

11) if the opposite table shows the 5 – number summary of the weights of your family members about – of the weights have more than what number ?

Min.	Q1	MEDIAN	Q3	Max
60	75	95	105	120

Ⓐ 60   Ⓑ 75   Ⓒ 95   Ⓓ 105

12) A merchant sold 12 same boxes of mango for 3,000 L.E , then the price each box is .... L.E .

Ⓐ 25   Ⓑ 250   Ⓒ 240   Ⓓ 230

13 …………….. is lying between − 1.4 and − 0.9

Ⓐ − 0.7　　　　　Ⓑ − 1.3　　　　　Ⓒ − 1.6　　　　　Ⓓ − 0.90

14 Which of the following are relatively prime numbers?

Ⓐ 2 and 6　　　　Ⓑ 4 and 9　　　　Ⓒ 4 and 8　　　　Ⓓ 10 and 15

15 − 4 ………………− 8

Ⓐ >　　　　　Ⓑ <　　　　　Ⓒ =

Complete the following:

- In the opposite histogram
  The class intervals having
  The greatest frequency is ……………………

- In the opposite venn diagram , the L.C.M is ……………..

- The …………………= the greatest value − the smallest value

- If − x = − , then x = ……………………

- _ + _ + _ = ……………………….

- The quotient of k and 3 written as …………………

- _ − . − = …………………….

- (3 , …………………….) satisfies the rule : y　 − x + 1
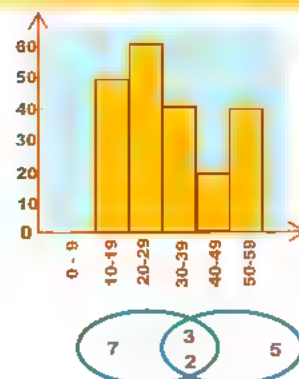
Answer the following answer :

🔴 Find the L.C.M of 4 and 6 using venn diagram .

………

………

🔵 The following data represents the ages of 30 workers in a company .

17	35	32	25	30	19	42	20	62	17
38	39	41	24	18	20	38	21	54	19
27	20	30	59	21	35	40	56	48	33

Draw a histogram to represent this data .

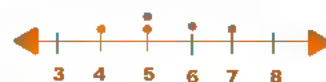🔴 Complete the following table according to the equation : $y = 2x + 1$

	0	4	8	10	13
	……	……	……	……	……

TEST 5

Choose the correct answer

(1) The outlier value of the following data set is ....

| 23 | 25 | 27 | 24 | 94 | 21 | 22 | 79 |

  (A) 21   (B) 27   (C) 49   (D) 94

(2) The lower quartile for the set of data : 72 , 64 , 76 , 63 , 60 , 75 , 70 , 61 , 77 . is ....

  (A) 61   (B) 70   (C) 62   (D) 76

(3) What is the range of the following data set ?

  (A) 4   (B) 3

  (C) 5   (D) 7

(4) Wael has x L.E , his father gave him 5 L.E , then he has ....

  (A) $x - 5$ (B) $x + 5$ (C) $5x$ (D) –

(5) From the opposite box plot
The difference between Q_3 and Q_1 is ....

  (A) 12   (B) 14   (C) 10   (D) 6
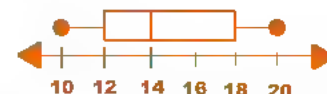
(6) In the opposite line, the integer A is ....

  (A) -1 (B) -2 (C) -3 (D) -4

(7) The coefficient in the algebraic expression $5 + 3x^2 + 1$ is ....

  (A) 5   (B) $3x^2$ (C) 3   (D) 1

(8) The common factor of all numbers is ....

  (A) 0   (B) 1   (C) 2   (D) 3

(9) – 0.5

  (A) >   (B) <   (C) =

(10) The upper quartile for the set of data : 100 , 101 , 103 , 97 , 98 , 99 and 102 is ....

  (A) 103   (B) 102   (C) 98   (D) 00

(11) $10 + 45 = 5$ [...   ]

  (A) 10 , 40   (B) 5 , 40   (C) 9 , 5   (D) , 9

(12) 10 less a number written as ....

  (A) $x - 10$ (B) $10 - x$ (C) $10 + x$ (D)

(13) the G.C.F of 6 and 9 is ....

  (A) 3   (B) 18   (C) 36   (D) I

(14) – ....– –

  (A) >   (B) <   (C) =

(15) A number if added to 7 , the sum is 13 , then the number is ....

  (A) 5   (B) 20   (C) 6   (D) 15

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16 " 6 times m added to 2 equals n " in equation is ....

Ⓐ 6m − 2 = n   Ⓑ 6n + 2 = m   Ⓒ 6m + 2 = n   Ⓓ 6 × 2m = n

17 Each of the following data could be

Represented by the box plot except ....

Ⓐ 3,5,7,8,9,10,10,11,13,14,18   Ⓑ 3,6,7,7,8,10,11,12,13,15,18

Ⓒ 3,4,6,7,9,10,11,11,13,17,18   Ⓓ 3,4,7,9,9,10,12,13,13.16,18

18 The number − 9 .... the set of rational number .

Ⓐ Belongs to   Ⓑ does not belong to

Ⓒ Is subset from   Ⓓ is not subset from

Complete the following question :

The balance of the following data set : 17 , 18 , 20 , 20 , 20 , 21 , 21 , 21 and 22 is ....

$10 ÷ 5 + 2^3 - 4 = $ ....

If 6 y = 18 , then − y = ...

The distance between 5 and | 5| on the number line is ....unit (s)

The values that lie outside most of the other values in asset of data called ....

In the equation : 3,410 ÷ 63 = 54 R8 , the divisor is ....

The verbal phrase for : h + 12 = 19 is ....

18 + 9 = 9 (..........................+ ....)

If the mean of 3 , 7 , 4 , 6 , x is 5 , then x = ...

Answer the following questions :

🔴 Find the G.C.F and L.C.M of 10 and 30 using venn diagram .

....

🔵 The following table shows the daily wages of 50 workers of a company .

Sets	120 − 129	130 − 139	140 − 149	150 − 159	160 − 169
Frequency	8	10	16	12	4

Draw histogram for this distribution

🔴 Wafaa's flower garden consists of − cornflowers and − poppies . the rest of the garden is filled with

the roses . what is the fraction of the roses in wafaa's garden ?

....

🔵 Examine these two expressions and determine whether they are equal if so , consider whether they are

always equal . complete each tasks .

4 (x + 1)   3x + x

- Try to find a value for x that will make the expressions not equal .

- Decide if these two expressions are always equal and if they should be considered equivalent expressions .

TEST 6

Choose the correct answer

1) The number – 9 ……………. the set of rational number .
- Ⓐ Belongs to
- Ⓑ does not belong to
- Ⓒ Is subset from
- Ⓓ is not subset from

2) 2^3 = …………………
- Ⓐ 2 × 2
- Ⓑ 3 × 3
- Ⓒ 3^2
- Ⓓ 8

3) The smallest number from the following is ………………..
- Ⓐ 0.11
- Ⓑ 0.2
- Ⓒ 0.3
- Ⓓ 0.101

4) In the equation: 1,860 ÷ 32 = 58 R 4 , the remainder is …………………..
- Ⓐ 1,860
- Ⓑ 32
- Ⓒ 58
- Ⓓ 4

5) Which are the three possible solutions for the inequality z > 12 ?
- Ⓐ 5,7,9
- Ⓑ 10,12,14
- Ⓒ 13,17,22
- Ⓓ 12,22,32

6) The lower quartile for the set of data : 23,21,17,18,20 and 19 is ………………
- Ⓐ 17
- Ⓑ 18
- Ⓒ 19
- Ⓓ 20

7) The first operation you perform in the expression: $10 ÷ 56 + (3 – 1)^2$ is …………….
- Ⓐ Add
- Ⓑ subtract
- Ⓒ exponent
- Ⓓ divide

8) In the equation: y = –x , if the input is 12 , then the output is ………………..
- Ⓐ 48
- Ⓑ 3
- Ⓒ 12 –
- Ⓓ 11 –

9) |–8| > …………………..
- Ⓐ |–7|
- Ⓑ |–8|
- Ⓒ |–9|
- Ⓓ |–10|

10) Which of the following is an integer?
- Ⓐ —
- Ⓑ – –
- Ⓒ – —
- Ⓓ 0.4

11) The better measure of central tendency the following data set is ……….. ………………
- Ⓐ Mean
- Ⓑ median
- Ⓒ either

12) which expression is equivalent to 2 x + 10 ?
- Ⓐ 2(x + 5)
- Ⓑ 12x
- Ⓒ 20 x
- Ⓓ 2x + 4 + 2

13) " y equals the product of " x and 3 " in the equation is ………………..
- Ⓐ Y = 3x
- Ⓑ 5 x + 3
- Ⓒ $29 – 3^3$
- Ⓓ 2 (4 + 5)

14) In which dot plot graph , the outlier increases the mean ?

Complete the following :

From the opposite number line the integer for point A
is ……………and its opposite is …………………

A
-1 0   3

If 8 m = 0 , then 100 m = ………………….

The absolute values of the two opposites are ………………

The coefficient of $2 + 3a - 5$ is ……………………….

The distance between -3 and 0 on the number line equals …………unit (s)

The smallest number of (0.1 , — , 0.7 , 2.1) is …………………

The age of bassem now is x years old , then his age after 3 years is ……………….

The median of the values $k + 1$, $k + 2$, $k + 3$, $k + 4$ and $k + 5$ is 13 , then k = ……………

From the opposite dot plot , Answer the following questions :

....

....

Movies seen at the theater at last month

0 1 2 3 4 5 6 7 8 9 10
Number of movies

- How many people were surveyed ?

....

- How many people saw 3 movies ?

....

- How many people saw 2 movies or more ?

....
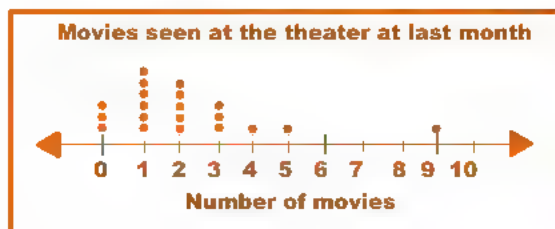
Evaluate the expression : $5 x^2 + 8 \div (6 - 4) \div 2$ **at x = 3**

....

....

**An owner of a packing food factory wanted to pack 15,708 kilograms of sugar equally in 68 packs .
What is the mass of each pack ?**

....

....

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Choose the correct answer

1 9 (5 + 6) = ... + 54
- Ⓐ 45
- Ⓑ 95
- Ⓒ 96
- Ⓓ 36

2 The G.C.F of two relatively prime numbers is ....
- Ⓐ 0
- Ⓑ 1
- Ⓒ 2
- Ⓓ 3

3 The absolute value of the opposite of – 1 – is ....
- Ⓐ 2–
- Ⓑ 0
- Ⓒ 1–
- Ⓓ – 1 –

4 Mohamed has 60 L.E , his friend ali has less money than Mohamed , the ali may has ....
- Ⓐ 53
- Ⓑ 61
- Ⓑ 100
- Ⓓ 60

5 In the opposite histogram:
How many students get more
Then 50 marks?
- Ⓐ 20
- Ⓑ 50
- Ⓒ 70
- Ⓓ 120
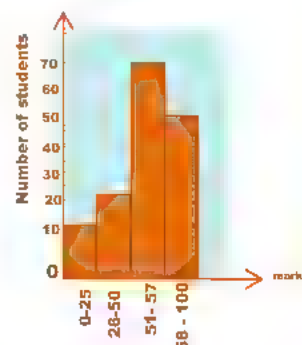
6 The number 2.71 belongs to .... Numbers
- Ⓐ Counting
- Ⓑ natural
- Ⓒ integer
- Ⓓ rational

7 The median for the set of values : 109 , 90 , 114 , 120 , 97 , 104 , 93 , 98 , 127 , 94 is ...
- Ⓐ 98
- Ⓑ 101
- Ⓒ 104
- Ⓓ 107

8 Which of the following are like terms ?
- Ⓐ 23 and 32
- Ⓑ b a and b c
- Ⓒ ab^2 and $a c^2$
- Ⓓ l and m

9 ‖ + 2 = ...
- Ⓐ 3
- Ⓑ 3
- Ⓒ 3
- Ⓓ 3

10 The range of values : 5 , 9 , 10 , 7 and 4 is ....
- Ⓐ 5
- Ⓑ 6
- Ⓒ 7
- Ⓓ 10

11 5^4 =.................
- Ⓐ 4^5
- Ⓑ 4 × 5
- Ⓒ 5 × 5 × 5 × 5
- Ⓓ 4 × 4 × 4× 4 × 4

12 The greatest number from the following is ....
- Ⓐ
- Ⓑ
- Ⓒ
- Ⓓ

13 The mean of values : 3 , 5 , 4 , 7 and 6 is ....
- Ⓐ 3
- Ⓑ 4
- Ⓒ 5
- Ⓓ 6

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14 The smallest non-negative integer is ………………

   Ⓐ − 1   Ⓑ − 2   Ⓒ 0   Ⓓ 1

15 $19,160 \div 56 = 342$ R …………………

   Ⓐ 7   Ⓑ 8   Ⓒ 9   Ⓓ 10

16 $16 + 24 = 8 (2 + ………)$

   Ⓐ 24   Ⓑ 16   Ⓒ 2   Ⓓ 3

17 The additive inverse of -2 is ……………………

   Ⓐ − 2   Ⓑ 2   Ⓒ 0   Ⓓ 4

Complete the following :

$3 - + 1 - =$ …………………….

" 4 increased by L equals q " in equation is ……………………

The median for the set of values : 15 , 15 , 17 , 18 , 19 , 21 , 22 , 22 , 23 is ……………

If $k + 1 = 5$, then $k - 2 =$ ……………………

The L.C.M of 5 and 8 is ……………………….

$|-4| + \left|3\frac{1}{}\right| =$ ……………………

In the opposite dot plot , the median is …………………

  10 20   30   40 50
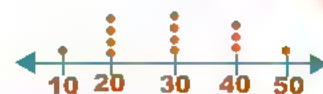
Answer the following questions :

● Arrange in a descending order : $- 8 , |-7| , 2 , 0 ,$

The order is : ……………………………………………………

● One time , 161 soil samples were sent in equals groups to 23 labs .
How many soil samples were sent to each lab ?

……………………………………………………………………………………

……………………………………………………………………………………

● A factory produces 48 pieces of cloth daily .
How many days does it produce 1,152 pieces of cloth .

……………………………………………………………………………………

……………………………………………………………………………………

● Write the following numbers in the opposite
Venn diagram .

34 , 2 , 0.225 , −10 , 0 ,

Rational numbers
Integers
Natural numbers
Counting Number

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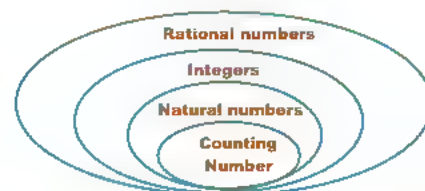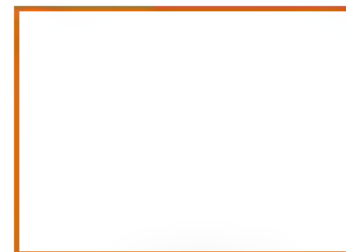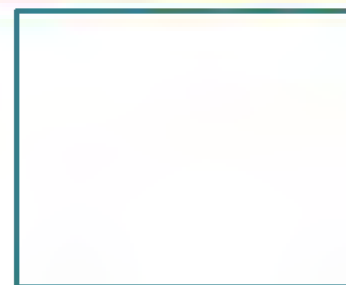
Choose the correct answer

(1) The range of values : 9 , 10 , 3 , 1 , 8 , 11 , 0 is ....

   (A) 1   (B) 0   (C) 11   (D) 10

(2) Three cubed add to five squared equals ....

   (A) $3 \times 3 + 5 \times 5$ (B) $3^3 + 5^3$ (C) $3^2 + 5^3$ (D) $3^3 + 3^5$

(3) In the equation : $m = 3n + 4$, the dependent variable is ....

   (A) M   (B) 3   (C) n   (D) 4

(4) ....is lying between 2.14 and 2.2

   (A) 2.15   (B) 2.21   (C) 2.20   (D) 2.22

(5) The mean of values which represents

The opposite dot plot is ....

   (A) 6   (B) 7

   (A) 8   (B) 9

(6) The best subset of − 4 is ....numbers .

   (A) Counting   (B) natural   (C) integer   (D) rational

(7) The opposite histogram shows

The number of magazines read

Last week by students in your class .

Which interval contains the fewest data ?

   (A) 1–2   (B) 3–4

   (A) 5–6   (B) 7–8
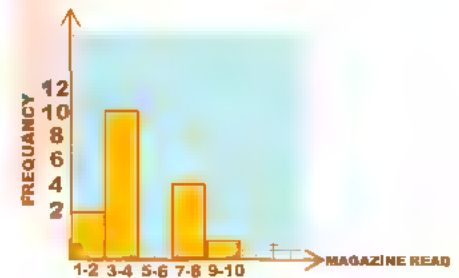
(8) If the lower quartile of the values : k + 14 , k + 10 k + 12 , k + 15 , k + 16 , k + 11 , k + 14 , k + 17 where k is appositive integer is 16.5 , then k = ...

   (A) 3   (B) 4   (C) 5   (D) 6

(9) $5\frac{1}{2} + 3\frac{1}{5}$

   (A) $8\frac{2}{7}$ (B) $8\frac{7}{10}$ (C) $8\frac{1}{2}$ (D) $8\frac{2}{5}$

(10) The equation that represents the opposite figure is ....

   (A) $X + 2 = 6$ (B) $2x = 6$

   (A) $X + 2 = 5$ (B) $2x = 3$

(11) In the opposite venn diagram , the L.C.M is ....

   (A) 1   (B) 3

   (A) 2×5 (B) 30

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⑫ 6,280 ÷ 25 = ...

Ⓐ 215 R5   Ⓑ 251 R5   Ⓒ 251   Ⓓ 255 R 1

⑬ The mode of the values : 5 , 3 , 2 , 5 , 8 , 1 , 5 and 4 is ....

Ⓐ 1   Ⓑ 2   Ⓒ 3   Ⓓ 5

⑭ Which of the following is equivalent to the expression : $5x + 3 + x$?

Ⓐ $6x + 2$ Ⓑ $8x + x$ Ⓒ $3(2x + 1)$ Ⓓ $9x$

⑮ The outlier of the following values : 32 , 37 , 36 , 5 , 40 , 38 and 39 is ....

Ⓐ 32   Ⓑ 40   Ⓒ 5   Ⓓ 39

Complete the following :

In the opposite dot plot , the median is ....

The verbal form of " k^2 "is ....

Hoda bought 15 pens for 180 L.E , then the price of each pen is ....L.E

The outlier value of the following data set is ....

| 203 | 204 | 205 | 23 | 206 | 207 | 202 | 201 |

10 20 30 40 50

In the equation : $l = 4m - 3$, the independent variable is ....

Youssef read at least 4 books monthly , then he may be read ....book (s)

$4 + 3^2 \times 2 \div (3-1) = $ ....

The smallest non – negative rational number is ....

The verbal form of " $k^3 + 1$ " is ....

In the equation : $5x + 3 = y$, the dependent variable is ....

.... is a solution of the inequality $x > -5$

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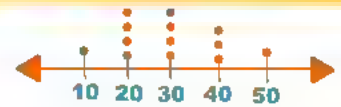
Answer the following answers :

From the opposite graph answer the following questions :

- Write a statistical questions you have been asked to graph This bar graph
  ....
  ....

- How many students passed in math quiz ?
  ....

- How many subject have at least 60 students passed the quiz ?
  ....

- Which subject has the lowest number of students passed the quiz ?
  ....

Number of students passed
The monthly quiz in each subject
Number of students
math English science social
subject

Find a rational number lying between $\dfrac{3}{5}$ and $\dfrac{2}{3}$

....

TEST 9
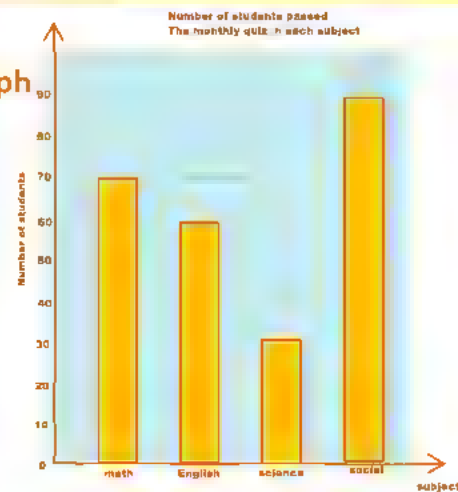
Choose the correct answer

1 The set of integers ....the set of rational numbers.

Ⓐ Belongs to　　　　　Ⓑ does not belong to

Ⓒ Is a subset of　　　　Ⓓ is not a subset of

2 The number of like terms in the expression: $4 + 3x + 2$ is ....

Ⓐ 4　　　　Ⓑ 3　　　　Ⓒ 2　　　　Ⓓ 3x

3 $2 - -1 - =$ ....

Ⓐ 1 –　　　Ⓑ –　　　Ⓒ 1 –　　　Ⓓ –

4 $- -$ .... zero

Ⓐ >　　　Ⓑ <　　　Ⓒ =

5 The value of the expression : $5n - 2$ for $n = 1$ is ....

Ⓐ 5　　　Ⓑ 3　　　Ⓒ –2　　　Ⓓ 1

6 All the following are a solution of the inequality : $x < -1$ except

Ⓐ – 5　　　Ⓑ – 4　　　Ⓒ – 3　　　Ⓓ – 1

7 The better measure of center for the following data set is ....

Ⓐ Mean　　　Ⓑ median　　　Ⓒ either

8 In the opposite venn diagram , the G.C.F is ....

Ⓐ 3　　　Ⓑ 5　　　Ⓒ 2　　　Ⓓ 1

9 If $= 3$, then x = ...

Ⓐ 2　　　Ⓑ 3　　　Ⓒ 6　　　Ⓓ 1.5

10 $35 + 42 =$ ....$(5 + 6)$

Ⓐ 35　　　Ⓑ 30　　　Ⓒ 6　　　Ⓓ 7
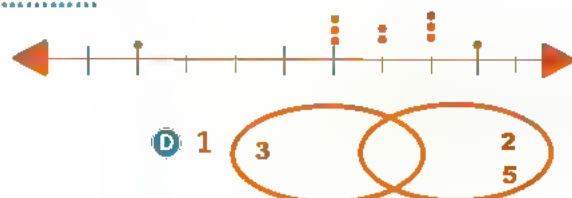
Complete the following :

- The value of expression $4l - 2$ for $l = 3$ is ....

- In the opposite venn diagram , the G.C.F is ....

- The median of the following data which is represented by the dot plot

- $3 -$ in the form $-$ is ....

- The verbal form of " $2x + 3$ " is ....

- The greatest non – positive integer is ....

- The integers between -4 and 2 are ....

- The rule is " multiply by 4 " where x is the independent variable , if $x = -$, then y would be ....

- $\left| \ - \ \right| \div 1\dfrac{1}{\ } =$ ....

- If $x + 3 = 5$ then $3x =$ ....

- The independent variable in the equation $5L - 3 = m$ is.................

- $15,015 \div 15 =$ ....

Answer the following questions

Complete the following table , then represent it graphically the equation : $y = x + 1$

	0	1	2
	....	....	....
	(0 , ...)	(1 , ...)	(2 , ...)
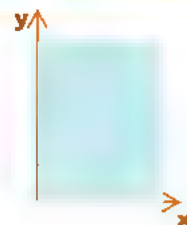
draw the box plot for the following data .

$$5 , 7 , 13 , 11 , 2 , 1 , 2 , 14 , 16 , 10 , 3$$

- Min . = ...
- Q1 = ...
- Median = ...
- Q3 = ...
- Max . = ...
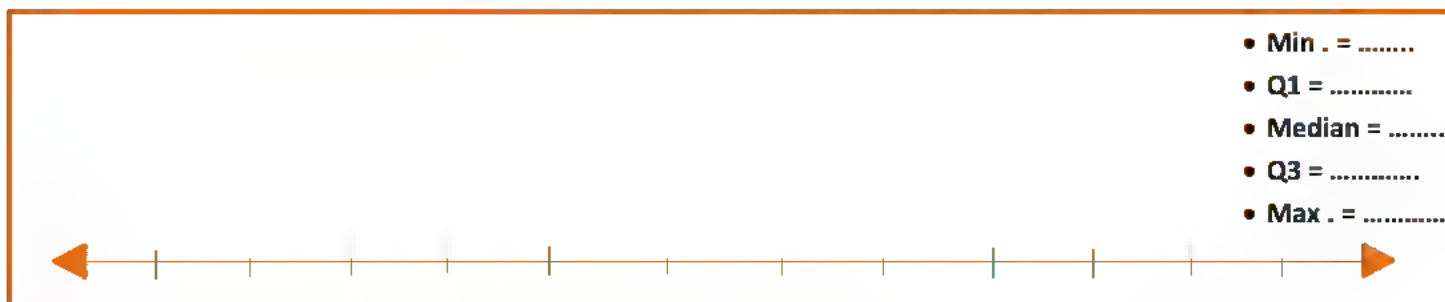
Mira has 25 L.E in her money box she will save 20 L.E daily

- What the algebraic expression represent this situation ?

  ....

- How much money in her money box after 3 days ?

  ....

- How much money in her money box after 6 days

  ....

امتحانات رقم (7)

الترم الاول

Question 1 : Choose the correct answer :

1. The additive inverse of the number – 20.5 is ....
   - (a) 20
   - (b) 0
   - (c) | – 20.5 |
   - (d) – 20.5

2. An integer lying between 6 and –6 is ....
   - (a) -6
   - (b) -1
   - (c) – 7
   - (d) all of them

3. The product of the multiplicative identity and the greatest non-positive number is .....
   - (a) 1
   - (b) 0
   - (c) 2
   - (d) -1

4. The mean of 8 , 7, 1 , 4 is ....
   - (a) 5
   - (b) 5.5
   - (c) 7
   - (d) 0

5. The greatest integer satesfies the inequality $m < 2$ is ....
   - (a) -3
   - (b) 100
   - (c) 2
   - (d) 1

6. If : $x + 1 = 7$,then the value of half x is ....
   - (a) 6
   - (b) 4
   - (c) 8
   - (d) 3

7. $360 \div 24 = $ ....
   - (a) 15
   - (b) 12
   - (c) 240
   - (d) 36

Question 2 : Complete the following :

1. $5 \times 5 \times 5 \times 5 = 5^{.....}$

2. The lower quartile for the values (4 , 6 , 4 , 7 , 20) is ......

3. LCM for 12 and 6 is ......

4. The algebraic expression $5 + 4x – 2n – 3c$ is formed from ......terms.

5. $3240 \div 8 = $ ......

6. The opposite of $\frac{5}{9}$ is ......

7. GCF of 5 and 11 is ......

8. If $6m = 12$,then $m + 5 = $ ......

Question 3 : Choose the correct answer :

1 The smallest odd prime number is ....
- (a) 0
- (b) 1
- (c) 2
- (d) 3

2 6^2 = ...
- (a) 12
- (b) 6
- (c) 36
- (d) 8

3 If $\frac{a}{b}$ is a rational number ,then b not equal ....
- (a) a
- (b) 0
- (c) 1
- (d) negative number

4 The like terms in the expression : x + 2 + y + 5 are ....
- (a) x,y
- (b) x,2
- (c) 5,2
- (d) 2,y

5 The solution of the equation : 3 x – 5 = 10 is ....
- (a) 5
- (b) 3
- (c) 10
- (d) x

6 An integer just after –5 is ....
- (a) 5
- (b) -4
- (c) -6
- (d) -5

7 The first operation you preform in the expression $4 - (8 + 5^3) \times 20$ is ....
- (a) multiply
- (b) add
- (c) exponent
- (d) divide

Question 4 : Answer the following :

1 Find the result of : (3 x 5 – 2 m) + 10 ,when m = 6
....

2 A school with 816 students . they will be distributed equally into 24 classes . what is the number of students in each class ?
....

3 Put this numbers on the number line : 2.9 , $- 1\frac{2}{7}$, – 3.4 , 0.8
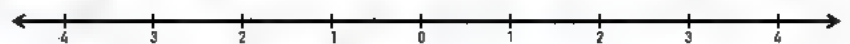
4 Answer from the opposite box plot

1- The median is ....
2- The lower quartile is ....
3- The upper quartile is ....
4- The minimum value is..........
5- The maximum value is ....

إنتهت الأسئلة

Question 1 : Choose the correct answer :

1. The mean = the sum of values ....the number of this values
   - (a) +
   - (b) –
   - (c) X
   - (d) ÷

2. The best subset for the number 0 is ....
   - (a) counting numbers
   - (b) integers
   - (c) natural numbers
   - (d) rational numbers

3. If | x | = 6 ,then x = ...
   - (a) 12
   - (b) 6
   - (c) –6
   - (d) both b,c

4. – 100 [ ] 0
   - (a) <
   - (b) >
   - (c) =
   - (d) ≥

5. The pervious of the number –8 is ....
   - (a) – 8
   - (b) – 7
   - (c) –9
   - (d) 0

6. Which of the following is not a numerical expression ?
   - (a) $2 + 4 – 7^4$
   - (b) $(15 + 3) \times 2$
   - (c) $7(3 – 2)$
   - (d) $4x + 5$

7. ....+..........= 6 (2 + 3)
   - (a) 12,3
   - (b) 6,5
   - (c) 12,18
   - (d) 1,2

The inequality that represented by the opposite number line in the set of integers is...

8.
   - (a) x > -1
   - (b) x < -1
   - (c) x ≥ -1
   - (d) x ≤ -1
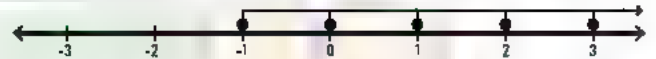
Question 2 : Complete the following :

1. The median of the following data which represented by the dot plot is......

2. The smallest non–negative integer is.....

3. In the equation : 4n + 7 = h , the dependent variable is.....

4. The number whose prime factors are 2,2,3,3 is.....

5. $– 5\frac{2}{3}$ in the form $\frac{a}{b}$ is.....

6. The algebraic expression which represent : the sum of triple x and the number 6 is....

7. The mean of the values (12 , 6 , 7 , 5 , 5) is .....

8. –1.32 is....................to the set of integers .

Question 1 : Choose the correct answer :

1) $(2.5 ÷ 0.5)^2 + 10 - 4 = $ ....
- ⓐ 31
- ⓑ 16
- ⓒ 35
- ⓓ 10.5

2) Each number in the set of counting is called ....
- ⓐ set
- ⓑ integer
- ⓒ subset
- ⓓ element

3) $8 + 24 = 8 (1 + $ ....$)$
- ⓐ 8
- ⓑ 23
- ⓒ 8
- ⓓ 3

4) $| - 6 | + | 5 | = $ ....
- ⓐ -11
- ⓑ 11
- ⓒ 1
- ⓓ -1

5) If $y = 2 + 3x$, then (....... , 11) satesfies the equation .
- ⓐ 0
- ⓑ 35
- ⓒ 3
- ⓓ 33

6) The number of rational numbers lying between 5 and its opposite is ....
- ⓐ 10
- ⓑ 5
- ⓒ 0
- ⓓ infinite

7) From the opposite box plot : the upper quartile is ....
- ⓐ 8.5
- ⓑ 6.5
- ⓒ 10
- ⓓ 9

Question 2 : Answer the following :

1) Arrange the following values in ascending order :
$$-10 , - 18 , 23 , 0 , 190 , 0.25$$

2) Find GCF and LCM for 12 and 18 by using venn diagram

3) The opposite histogram shows number of books Owned by the students in your class.

Number of Books Owned

A- How many students own less than 40 books.....

B- How many students own more than 39 books........

C- Which interval has the least number of student..........

D- Which interval has the highest number of students.................

4) If the ticket of entering a car park is 30 pounds and 9 pounds for each hour you spend. What is the cost of spending 3 hours in the park ? " Write the algebraic expression "

إنتهت الأسئلة

Question 1 : Choose the correct answer :

1. Which measure of central tendency the best if their an extreme value (outlier) .
   - (a) median
   - (b) mean
   - (c) both a,b
   - (d) range

2. The set of natural numbers .... The set of rational numbers
   - (a) belong
   - (b) not belong
   - (c) subset
   - (d) not subset

3. Which data is a describtive data ?
   - (a) weight
   - (b) favorite color
   - (c) age
   - (d) length

4. If $x \leq -5$,then the largest integer satisfies the inequality is ....
   - (a) 5
   - (b) -4
   - (c) -5
   - (d) 0

5. The additive inverse of the number $| -10 |$ is ....
   - (a) -10
   - (b) 10
   - (c) 0
   - (d) $| -10 |$

6. The GCF of 5 and 15 is ....
   - (a) 5
   - (b) 15
   - (c) 1
   - (d) 0

7. The number of terms of the expression $2n - 6 + 15m + 14 x 2$ is ....terms
   - (a) 7
   - (b) 6
   - (c) 5
   - (d) 4

Question 2 : Complete the following :

1. $m + m = 6$, then m = ...

2. The LCM of 10 and 8 is ....

3. The median of the values $a + 1$, $a + 2$, $a + 3$, $a + 4$ and $a + 5$ is 23 then a = ...

4. 6 increased by b equal t ,then the equation is ....

5. In the algebraic expression $e + 2b + 6$,the constant is ....

6. The ....of a number is the distance between the number and zero .

7. In $5h + 20 = f$, the independent variable is ....

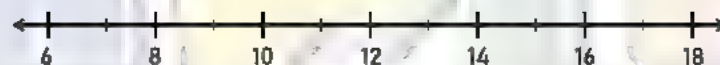8. Number of like terms in the expression $2b + 5 - 0.2n + 5b$ is ....terms .

Question 1 : Choose the correct answer :

1 The area of the square whose side length 5 cm in exponential form is ......

ⓐ 20   ⓑ 25   ⓒ 5^2 ⓓ 2^5

2 $- | -2 | > $ ....

ⓐ $| -2 |$ ⓑ 0   ⓒ -2   ⓓ -100

3 All of the following numbers are rational except ....

ⓐ 0   ⓑ $\frac{7}{5-2}$ ⓒ -45.23   ⓓ $\frac{6}{2-2}$

4 In the opposite venn diagram ,the GCF is ....

ⓐ 5   ⓑ 1   ⓒ 30   ⓓ 10

5 The mean of the dataset (6 , 12 , 2 , 4) is ....

ⓐ 10   ⓑ 24   ⓒ 5   ⓓ 6

6 The best subset for the number –2.6 is ....

ⓐ counting numbers   ⓑ integers   ⓒ natural numbers   ⓓ rational numbers

7 The smallest natural integer is ....

ⓐ 0   ⓑ -1   ⓒ 1   ⓓ -100

Question 4 : Answer the following :

1 Draw a box plot for this set of data.
ages of children taking math classes: 10, 8, 9, 7, 10, 12, 14, 14, 10, 16

2 Masa bought some books for 34 LE each . What is the number of books can Masa buy with 612 LE ?

----

3 Write the equation use the variables x and y , x is the independent variable "
multiply by 6 and add 5 " ,then substitute $x = \frac{1}{2}$ to evaluate y .

----

4 Evaluate the expression : $5x^2 + 8 \div (8 - 6) \div 2$,when x = 2 .

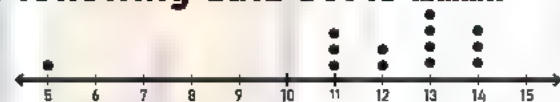

Question 1 : Choose the correct answer :

(1) A frequency its range 40 and the smallest value is 15 ,then the greatest value is ....

(a) 25   (b) 40   (c) 55   (d) 30

(2) The number whose all factors are 1,2,3,6 is ....

(a) 36   (b) 24   (c) 12   (d) 6

(3) The mean = ... ÷ number of values

(a) median   (b) range   (c) sum of values   (d) difference

(4) In the expression : $6x + 14 - b$, the coefficient of the variable d is........

(a) 6   (b) 14   (c) 1   (d) -1

(5) The smallest positive integer is ....

(a) 0   (b) 1   (c) -1   (d) 2

(6) A number whose prime factors are 2 , 5 and 7 is ....

(a) 7   (b) 10   (c) 14   (d) 70

(7) $c ÷ 9 = 5$,then c is ....

(a) 45   (b) 9   (c) 4   (d) 14

Question 2 : Complete the following :

(1) The best measure of central tendency of the following data set is ....

(2) $x > 5$ represent ......

(3) $5 (4 + 2) = ...+ 10$

(4) The common factor of all numbers is ....

(5) The value that lie outside most of the other values in a set of data called ....

(6) ....question is a question that has only one answer.

(7) .... is a graph that has no gaps between bars .

(8) ....is the middle value in a set of values after arranging it

Question 1 : Choose the correct answer :

1. From the opposite table : about $\frac{3}{4}$ of the data more than what number ?
   - (a) 8
   - (b) 11
   - (c) 14
   - (d) 21

min	Q_1	median	Q_3	max
8	11	14	21	24

2. $2\frac{3}{7} + \frac{2}{5} = \ldots$
   - (a) $2\frac{5}{12}$
   - (b) $2\frac{29}{35}$
   - (c) $\frac{29}{35}$
   - (d) 3

3. If $-|x| = -10$, then $x = \ldots$
   - (a) -10
   - (b) 10
   - (c) both a,b
   - (d) 20

4. Integer that expresses the profit 100 LE is ....
   - (a) -1
   - (b) 200
   - (c) -100
   - (d) 100

5. The range of the values (30 , 47 , 20 , 17 , 25) is ....
   - (a) 17
   - (b) 30
   - (c) 20
   - (d) 47

6. Your weight is ....data .
   - (a) numerical
   - (b) categorical
   - (c) descriptive
   - (d) all of them

7. The prime factors of 10 are ....
   - (a) 1,10
   - (b) 2,8
   - (c) 2,5
   - (d) 3,7

Question 4 : Answer the following :

1. Complete the table ,then Draw a histogram to represent each set of data.

   number of points scored in each basketball game : 28, 16, 38, 44, 21, 38, 35, 48, 33, 29, 37, 39, 18, 38, 42, 37, 32

INTERVEL	FREQUENCY
10 - 19	
20 - 29	

Ponts Scord in Basketball Games

2. Complete the following table according to thr equation : $y = 3x + 2$

X	0	2	4	6
Y	.		.	.

3. Show that the following expressions are equivalent or not by using substituting
   $2(2t + 9)$, $4t + 18$

   ----

4. Rahma bought 56 meters of cloth with 6,944 LE , find the price of each meter ?

Question 1 : Choose the correct answer :

1. The mean of 5 , 8 , 6 , x is 5 ,then x = ...
   - (a) 0
   - (b) 1
   - (c) 2
   - (d) 3

2. The number ....neither positive nor negative
   - (a) 0
   - (b) 1
   - (c) -1
   - (d) 0.5

3. The natural numbers ....the counting numbers .
   - (a) belong
   - (b) not belong
   - (c) subset
   - (d) not subset

4. $5m + 8 \leq 12$ is ....
   - (a) Algebraic term
   - (b) equation
   - (c) expression
   - (d) inequality

5. To find the value of 5 x 4 ÷ 10 – (7 + 8) , we must do ....first .
   - (a) subtraction
   - (b) addition
   - (c) multipliction
   - (d) division

6. | –12.25 | = ...
   - (a) -12
   - (b) 12
   - (c) -12.25
   - (d) 12.25

7. Subtract 2.5 from m ,then multiply the result by 2 is ....
   - (a) (2.5 – m) x 2
   - (b) 2.5 – m x 2
   - (c) (m – 2.5) x 2
   - (d) m – 2.5 x 2

Question 2 : Complete the following :

1. The mode of the opposite data set is ....

2. If x + 20 = 26 ,then 0.5x = ...

3. 15 ÷ 3 + 9 – 14 = ...

4. The range of the values : 14 , 5 , 14 , 70 , 63 , 20 , 12 is ....

5. The distance between 4 and | –4 | is ....

6. Double of the number b is ....

7. The variable in the equation : 10 + 2m – 2.3 = 40 is ....

8. (8 , ...) satisfies the rule : $y = \frac{1}{2}x + 2$

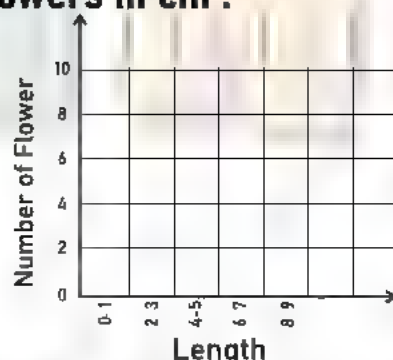## Question 1 : Choose the correct answer :

1) ....is a descriptive data .
   - (a) weight
   - (b) age
   - (c) Tall
   - (d) your father name

2) The equation is a mathematical expression contains ....between two mathematical sentences.
   - (a) $>$
   - (b) $<$
   - (c) $=$
   - (d) $\geq$

3) $-2\frac{5}{9}\ \boxed{}\ -5\frac{7}{9}$
   - (a) $>$
   - (b) $<$
   - (c) $=$
   - (d) $\geq$

4) The outlier for the set of data : 105 , 102 , 16 , 114 , 116 , 110 is ......
   - (a) 114
   - (b) 16
   - (c) 100
   - (d) 50

5) One is the only common factor of..........numbers
   - (a) relatively prime
   - (b) composite
   - (c) even
   - (d) odd

6) The integers is ....numbers .
   - (a) counting
   - (b) natural
   - (c) rational
   - (d) all of them

7) $- (-5) =$ ....
   - (a) -5
   - (b) 5
   - (c) 0
   - (d) 10

Question 2 : Answer the following :

1) Find the mean , median , mode , range and outlier for the following data :
   $$(12 , 5 , 3 , 3 , 4 , 7 , 8)$$
   ----

2) The following table represents lengths of flowers in cm :
   Represent this data by histogram.

Length	0–1	2–3	4–5	6–7	8–9
Number of Flower	5	10	8	1	2

3) Malak need 30 to by a CD . She doesn't have enough money to buy it. Write 4 possible amounts of money that Malak has.

   ----

4) Find four rational numbers lying between : 2.4 and 2.5

إنتهت الأسئلة

Question 1 : Choose the correct answer :

1. The additive inverse of the number – 20.5 is ....
   - (a) 20
   - (b) 0
   - (c) $|-20.5|$
   - (d) – 20.5

2. An integer lying between 6 and –6 is ....
   - (a) -6
   - (b) **-1**
   - (c) – 7
   - (d) all of them

3. The product of the multiplicative identity and the greatest non–positive number is ......
   - (a) 1
   - (b) **0**
   - (c) 2
   - (d) -1

4. The mean of 8 , 7, 1 , 4 is ....
   - (a) **5**
   - (b) 5.5
   - (c) 7
   - (d) 0

5. The greatest integer satesfies the inequality $m < 2$ is ....
   - (a) -3
   - (b) 100
   - (c) 2
   - (d) **1**

6. If : $x + 1 = 7$,then the value of half x is ....
   - (a) 6
   - (b) 4
   - (c) 8
   - (d) **3**

7. $360 \div 24 = $ ....
   - (a) **15**
   - (b) 12
   - (c) 240
   - (d) 36

Question 2 : Complete the following :

1. $5 \times 5 \times 5 \times 5 = 5^{4}$

2. The lower quartile for the values (4 , 6 , 4 , 7 , 20) is **4**

3. LCM for 12 and 6 is **12**

4. The algebraic expression $5 + 4x - 2n - 3c$ is formed from **4** terms.

5. $3240 \div 8 = $ **405**

6. The opposite of $\frac{5}{7}$ is **$-\frac{5}{7}$**

7. GCF of 5 and 11 is **1**

8. If $6m = 12$,then $m + 5 = $ **7**

Question 1 : Choose the correct answer :

1 The smallest odd prime number is ....
- (a) 0
- (b) 1
- (c) 2
- **(d) 3**

2 $6^2 = $ ....
- (a) 12
- (b) 6
- **(c) 36**
- (d) 8

3 If $\frac{a}{b}$ is a rational number ,then b not equal ....
- (a) a
- **(b) 0**
- (c) 1
- (d) negative number

4 The like terms in the expression : x + 2 + y + 5 are ....
- (a) x,y
- (b) x,2
- **(c) 5,2**
- (d) 2,y

5 The solution of the equation : 3 x – 5 = 10 is ....
- **(a) 5**
- (b) 3
- (c) 10
- (d) x

6 An integer just after –5 is ....
- (a) 5
- **(b) -4**
- (c) -6
- (d) -5

7 The first operation you preform in the expression 4 – (8 + 5^3) x 20 is ....
- (a) multiply
- (b) add
- **(c) exponent**
- (d) divide

Question 2 : Answer the following :

1 Find the result of : (3 x 5 – 2 m) + 10 ,when m = 6

...............(3 x 5 – 2 x 6) + 10 = 13 ....

2 A school with 816 students . they will be distributed equally into 24 classes . what is the number of students in each class ?

...............816 ÷ 24 = 34 students...............................

3 Put this numbers on the number line : 2.9 , $-1\frac{2}{7}$, – 3.4 , 0.8
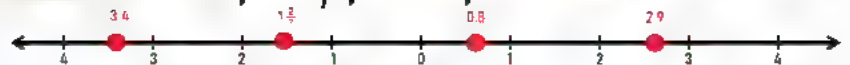
4 Answer from the opposite box plot

1- The median is 8

2- The lower quartile is 6

3- The upper quartile is 9

4- The minimum value is 4

5- The maximum value is 10

إنتهت الأسئلة

Question 1 : Choose the correct answer :

1 The mean = the sum of values ....the number of this values
- (a) +
- (b) −
- (c) x
- **(d) ÷**

2 The best subset for the number 0 is ....
- (a) counting numbers
- (b) integers
- **(c) natural numbers**
- (d) rational numbers

3 If $|x| = 6$,then x = ...
- (a) 12
- (b) 6
- (c) −6
- **(d) both b,c**

4 − 100 [ ] 0
- **(a) <**
- (b) >
- (c) =
- (d) ≥

5 The pervious of the number −8 is ....
- (a) − 8
- (b) − 7
- **(c) −9**
- (d) 0

6 Which of the following is not a numerical expression ?
- (a) $2 + 4 − 7^4$
- (b) $(15 + 3) \times 2$
- (c) $7(3 − 2)$
- **(d) $4x + 5$**

7 ....+............= 6 (2 + 3)
- (a) 12,3
- (b) 6,5
- **(c) 12,18**
- (d) 1,2

8 The inequality that represented by the opposite number line in the set of integers is ....
- (a) x > −1
- (b) x < −1
- **(c) x ≥ −1**
- (d) x ≤ −1

Question 2 : Complete the following :

1 The median of the following data which represented by the dot plot is **4**

2 The smallest non−negative integer is **0**

3 In the equation : 4n + 7 = h , the dependent variable is **h**

4 The number whose prime factors are 2,2,3,3 is **36**

5 $− 5\frac{2}{3}$ in the form $\frac{a}{b}$ is $\boxed{-\frac{17}{3}}$

6 The algebraic expression which represent : the sum of triple x and the number 6 is **3x + 6**

7 The mean of the values (12 , 6 , 7 , 5 , 5) is **7**

8 −1.32 is **not belong** to the set of integers.

Question 1 : Choose the correct answer :

1. $(2.5 \div 0.5)^2 + 10 - 4 =$ ....
   - **(a) 31** ✓
   - (b) 16
   - (c) 35
   - (d) 10.5

2. Each number in the set of counting is called ....
   - (a) set
   - (b) integer
   - (c) subset
   - **(d) element** ✓

3. $8 + 24 = 8 (1 + $ ....$)$
   - (a) 8
   - (b) 23
   - (c) 8
   - **(d) 3** ✓

4. $| -6 | + | 5 | =$ ....
   - (a) -11
   - **(b) 11** ✓
   - (c) 1
   - (d) -1

5. If $y = 2 + 3x$, then $($ .... $, 11)$ satesfies the equation .
   - (a) 0
   - (b) 35
   - **(c) 3** ✓
   - (d) 33

6. The number of rational numbers lying between 5 and its opposite is ....
   - (a) 10
   - (b) 5
   - (c) 0
   - **(d) infinite** ✓

7. From the opposite box plot : the upper quartile is ....
   - (a) 8.5
   - (b) 6.5
   - (c) 10
   - **(d) 9** ✓

Question 4 : Answer the following :

1. Arrange the following values in ascending order :
   $$-10 \ , \ - 18 \ , \ 23 \ , \ 0 \ , \ 190 \ , \ 0.25$$
   .... $-18 \ , \ -10 \ , \ 0 \ , \ 0.25 \ , \ 23 \ , \ 190$ ....

2. Find GCF and LCM for 12 and 18 by using venn diagram
   GCF = 2 X 3 = **6**
   LCM = 2 X 2 X 3 X 3 = 36

3. The opposite histogram shows number of books Owned by the students in your class.

   A- How many students own less than 40 books **9**

   B- How many students own more than 39 books **10**

   C- Which interval has the least number of student **60-69**

   D- Which interval has the highest number of students **50-59**

4. If the ticket of entering a car park is 30 pounds and 9 pounds for each hour you spend. What is the cost of spending 3 hours in the park ? " Write the algebraic expression "
   .... the algebraic expression is 9x + 30 ....
   .... the cost is 9 x 3 + 30 = 57 pounds ....

Question 1 : Choose the correct answer :

1. Which measure of central tendency the best if their an extreme value (outlier) .
   - (a) **median**
   - (b) mean
   - (c) both a,b
   - (d) range

2. The set of natural numbers .... The set of rational numbers
   - (a) belong
   - (b) not belong
   - (c) **subset**
   - (d) not subset

3. Which data is a describtive data ?
   - (a) weight
   - (b) **favorite color**
   - (c) age
   - (d) length

4. If $x \leq -5$, then the largest integer satisfies the inequality is ....
   - (a) 5
   - (b) -4
   - (c) **-5**
   - (d) 0

5. The additive inverse of the number $| -10 |$ is ....
   - (a) **-10**
   - (b) 10
   - (c) 0
   - (d) $| -10 |$

6. The GCF of 5 and 15 is ....
   - (a) **5**
   - (b) 15
   - (c) 1
   - (d) 0

7. The number of terms of the expression $2n - 6 + 15m + 14 x 2$ is ......terms
   - (a) 7
   - (b) 6
   - (c) 5
   - (d) **4**

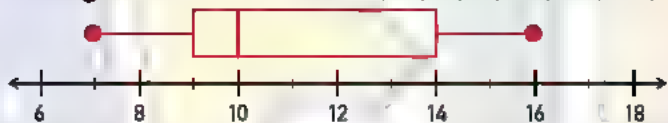**Question 2 : Complete the following :**

1. $m + m = 6$, then m = **3**

2. The LCM of 10 and 8 is **40**

3. The median of the values $a + 1$, $a + 2$, $a + 3$, $a + 4$ and $a + 5$ is 23 then a = **20**

4. 6 increased by b equal t ,then the equation is **6 + b = t**

5. In the algebraic expression $e + 2b + 6$,the constant is **6**

6. The **absolute value** of a number is the distance between the number and zero .

7. In $5h + 20 = f$, the independent variable is **h**

8. Number of like terms in the expression $2b + 5 - 0.2n + 5b$ is **2** terms .

Question 1 : Choose the correct answer :

① The area of the square whose side length 5 cm in exponential form is ......
ⓐ 20   ⓑ 25   ⓒ 5^2 ⓓ 2^5

② $-|-2| > $ ....
ⓐ $|-2|$ ⓑ 0   ⓒ -2   ⓓ -100

③ All of the following numbers are rational except ....
ⓐ 0   ⓑ $\frac{7}{5-2}$ ⓒ -45.23   ⓓ $\frac{6}{2-2}$

④ In the opposite venn diagram ,the GCF is ....
ⓐ 5   ⓑ 1   ⓒ 30   ⓓ 10

⑤ The mean of the dataset (6 , 12 , 2 , 4) is ....
ⓐ 10   ⓑ 24   ⓒ 5   ⓓ 6

⑥ The best subset for the number –2.6 is ....
ⓐ counting numbers   ⓑ integers   ⓒ natural numbers   ⓓ rational numbers

⑦ The smallest natural integer is ....
ⓐ 0   ⓑ -1   ⓒ 1   ⓓ -100

Question 2 : Answer the following :

① Draw a box plot for this set of data.
ages of children taking math classes: 10, 8, 9, 7, 10, 12, 14, 14, 10, 16

② Masa bought some books for 34 LE each . What is the number of books can Masa buy with 612 LE ?
.................612 ÷ 34 = 18 books.................

③ Write the equation use the variables x and y , x is the independent variable "
multiply by 6 and add 5 " ,then substitute x = $\frac{1}{2}$ to evaluate y .
..........The equation is y = 6x + 5 .... , then x = 8 ....

④ Evaluate the expression : $5x^2 + 8 ÷ (8 – 6) ÷ 2$,when x = 2 .
..........$5 × 2^2 + 8 ÷ (8 – 6) ÷ 2$..........
..........= 5 × 4 + 8 ÷ 2 ÷ 2..........
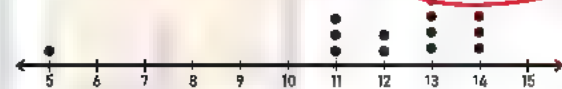..........= 20 + 4 ÷ 2 = 20 + 2 = 22..........

إنتهت الأسئلة

Question 1 : Choose the correct answer :

1. A frequency its range 40 and the smallest value is 15 ,then the greatest value is ....
   - (a) 25
   - (b) 40
   - (c) **55**
   - (d) 30

2. The number whose all factors are 1,2,3,6 is ....
   - (a) 36
   - (b) 24
   - (c) 12
   - (d) **6**

3. The mean = ... ÷ number of values
   - (a) median
   - (b) range
   - (c) **sum of values**
   - (d) difference

4. In the expression : 6x + 14 – b , the coefficient of the variable d is........
   - (a) 6
   - (b) 14
   - (c) 1
   - (d) **-1**

5. The smallest positive integer is ....
   - (a) 0
   - (b) **1**
   - (c) -1
   - (d) 2

6. A number whose prime factors are 2 , 5 and 7 is ....
   - (a) 7
   - (b) 10
   - (c) 14
   - (d) **70**

7. c ÷ 9 = 5 ,then c is ....
   - (a) **45**
   - (b) 9
   - (c) 4
   - (d) 14

Question 2 : Complete the following :

1. The best measure of central tendency of the following data set is **median**

2. x > 5 represent **inequality**

3. 5 (4 + 2) = **20** + 10

4. The common factor of all numbers is **1**

5. The value that lie outside most of the other values in a set of data called **outlier**

6. **non-statistecal** question is a question that has only one answer.

7. **histogram** is a graph that has no gaps between bars .

8. **median** is the middle value in a set of values after arranging it

Question 3 : Choose the correct answer :

1 From the opposite table : about $\frac{3}{4}$ of the data more than what number ?

  (a) 8   (b) **11**   (c) 14   (d) 21

m n	Q_1	median	Q_3	max
8	11	14	21	24

2 $2\frac{3}{7} + \frac{2}{5} = \ldots$

  (a) $2\frac{5}{12}$ (b) $2\frac{29}{35}$ (c) $\frac{29}{35}$ (d) 3

3 If $-|x| = -10$, then x = ...

  (a) -10   (b) 10   (c) **both a,b**   (d) 20

4 Integer that expresses the profit 100 LE is ....

  (a) -1   (b) 200   (c) -100   (d) **100**

5 The range of the values (30 , 47 , 20 , 17 , 25) is ....

  (a) 17   (b) **30**   (c) 20   (d) 47

6 Your weight is ....data .

  (a) **numerical**   (b) categorical   (c) descriptive   (d) all of them

7 The prime factors of 10 are ....

  (a) 1,10   (b) 2,8   (c) **2,5**   (d) 3,7

Question 4 : Answer the following :

1 Complete the table ,then Draw a histogram to represent each set of data.

number of points scored in each basketball game : 28, 16, 38, 44, 21, 38, 35, 48, 33, 29, 37, 39, 18, 38, 42, 37, 32

INTERVEL	FREQUENCY
10 19	2
20 – 29	3
30 – 39	9
40 – 49	3

Points Scord in Basketbal. Games
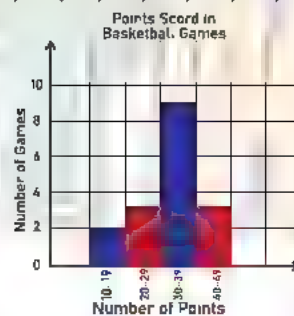
2 Complete the following table according to thr equation : y = 3x + 2

X	0	2	4	6
Y	2	8	14	20

3 Show that the following expressions are equivalent or not by using substituting

$$2(2t + 9) \quad , \quad 4t + 18$$

x=1 :   2(2 x 1 + 9) = 22 ,   4 x 1 + 18 = 22

x=2 :   2(2 x 2 + 9) = 26 ,   4 x 2 + 18 = 26   So , the two expressions are equivalent

4 Rahma bought 56 meters of cloth with 6,944 LE , find the price of each meter ?
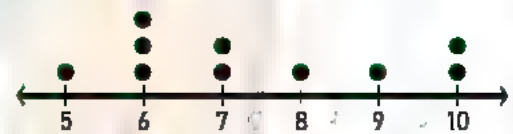
6,944 ÷ 56 = 124 L.E

Question 1 : Choose the correct answer :

1. The mean of 5 , 8 , 6 , x is 5 ,then x = ...
   - (a) 0
   - **(b) 1**
   - (c) 2
   - (d) 3

2. The number ....neither positive nor negative
   - **(a) 0**
   - (b) 1
   - (c) -1
   - (d) 0.5

3. The natural numbers ....the counting numbers .
   - (a) belong
   - (b) not belong
   - (c) subset
   - **(d) not subset**

4. 5m + 8 ≤ 12 is ....
   - (a) Algebraic term
   - (b) equation
   - (c) expression
   - **(d) inequality**

5. To find the value of $5 \times 4 \div 10 - (7 + 8)$, we must do ....first .
   - (a) subtraction
   - **(b) addition**
   - (c) multiplication
   - (d) division

6. | -12.25 | = ...
   - (a) -12
   - (b) 12
   - (c) -12.25
   - **(d) 12.25**

7. Subtract 2.5 from m ,then multiply the result by 2 is ....
   - (a) $(2.5 - m) \times 2$
   - (b) $2.5 - m \times 2$
   - **(c) $(m - 2.5) \times 2$**
   - (d) $m - 2.5 \times 2$

Question 2 : Complete the following :

1. The mode of the opposite data set is **6**

2. If x + 20 = 26 ,then 0.5x = **3**

3. $15 \div 3 + 9 - 14 =$ **0**

4. The range of the values : 14 , 5 , 14 , 70 , 63 , 20 , 12 is **65**

5. The distance between 4 and | -4 | is **0**

6. Double of the number b is **2b**

7. The variable in the equation : 10 + 2m - 2.3 = 40 is **m**

8. (8 , **6**) satisfies the rule : $y = \frac{1}{2} x + 2$

## Question 1 : Choose the correct answer :

1. ....is a descriptive data .
   (a) weight   (b) age   (c) Tall   **(d) your father name**

2. The equation is a mathematical expression contains ....between two mathematical sentences.
   (a) >   (b) <   **(c) =**   (d) ≥

3. $-2\frac{5}{9}$ ▢ $-5\frac{7}{9}$
   (a) >   (b) <   (c) =   (d) ≥

4. The outlier for the set of data : 105 , 102 , 16 , 114 , 116 , 110 is .....
   (a) 114   **(b) 16**   (c) 100   (d) 50

5. One is the only common factor of..........numbers
   (a) relatively prime   (b) composite   (c) even   (d) odd

6. The integers is ....numbers .
   (a) counting   (b) natural   **(c) rational**   (d) all of them

7. – (–5) = ...
   (a) -5   **(b) 5**   (c) 0   (d) 10

Question 2 : Answer the following :

1. Find the mean , median , mode , range and outlier for the following data :
   (12 , 5 , 3 , 3 , 4 , 7 , 8)
   Mean = 6 , median = 5 , mode = 3 , outlier = 12 , range = 9

2. The following table represents lengths of flowers in cm :
   Represent this data by histogram.

Length	0-1	2-3	4-5	6-7	8-9
Number of Flower	5	10	8	1	2
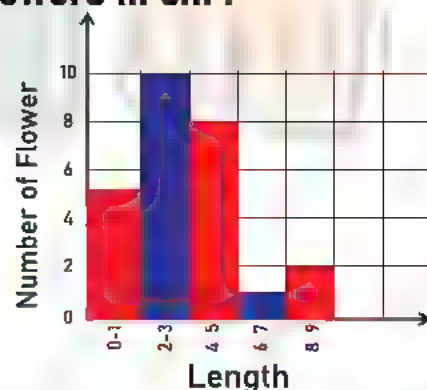
3. Malak need 30 to by a CD . She doesn't have enough money to buy it. Write 4 possible amounts of money that Malak has.
   20 , 25 , 10 , 12

4. Find four rational numbers lying between : 2.4 and 2.5
   2.41 , 2.42 , 2.45 , 2.49

امتحانات رقم (8)

الترم الاول

1ˢᵀ Exam

Q1- Choose the correct answer :-

1) $5 + 12 =$ .... $(5 + 12)$
   a) 1   b) 5   c) 60   d) 12

2) Number solutions of inequality $x < -2$ is ....
   a) 1   b) -1   c) 0   d) infinite

3) The number of terms of the expression $5x + 3y$ is ....
   a) 1   b) 5   c) 2   d) 3

4) "q is six times p add to 12" in equation is ....
   a) $q=6p-12$ b) $q=6p+12$ c) $p=6q-12$ d) $p=6q-12$

5) All the following numbers are rational except ....
   a) 1   b) $\dfrac{2}{7}$ c) $\dfrac{4-4}{7}$ d) $\dfrac{8}{5-5}$

6) In the equation $y = 2x + 1$,the ordered pair $(2 , a)$ satisfies the equation ,then $a =$ ....
   a) 5   b) $\dfrac{1}{2}$ c) 23   d) 6

7) The set of counting numbers .... the set of rational numbers.
   a) belong   b) not belong   c) subset   d) not subset

Q2- Complete the following :-

1) The smallest solution of the inequality $x > -1$ is ....
2) $\left| -3\dfrac{1}{4} \right| + \left| 1\dfrac{3}{4} \right| =$ ....
3) The verbal form of k^2 is ....
4) The L.C.M of 4 and 12 is ....
5) The lower quartile for the set of data :23 ,21 ,17 ,18 ,20 and 19 is ......
6) The range of the values 5 ,9 ,10 ,7 and 4 is ....
7) The types of statistical questions are .... & ....
8) Hoda bought 15 pens for 180 L.E.then the price of each pen is .... L.E.

Q3- Choose the correct answer :-

1) Which of the following is equivalent to the expression $5x + 3 + x$?
   a) 5x+2   b) 8x+x   c) 3(2x+1)   d) 9x

2) If $\frac{x}{3} = 2$, then x = ...
   a) 2   b) 3   c) 1.5   d) 6

3) .... is lying between 2.14 and 2.2
   a) 2.15   b) 2.21   c) 2.22   d) 2.13

4) The number 2.21 belongs to ....
   a) counting   b) integers   c) rational   d) natural

5) Mohamed has 60 L.E. , his friend Ali has less money than Mohamed , then Ali may has ....
   a) 53   b) 61   c) 100   d) 60

6) The better measure of center for the following data set is ....
   a) mode   b) median   c) mean   d) either

7) In the opposite Venn diagram , the G.C.F is ....
   a) 1   b) 2   c) 5   d) 3

Q4- Answer the following :-

1) Order the given set of numbers from greatest to least

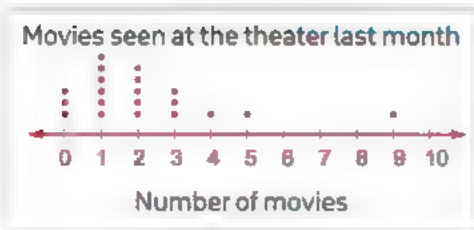 3.4 , $-2\frac{1}{2}$, 0 , $-4\frac{3}{7}$, $3\frac{1}{4}$

   ----

2) Ahmed saves 49 L.E. each week. After how many weeks he will save 12,005 L.E.

   ----

3) From the opposite dot plot,

   answer the following questions :-

Movies seen at the theater last month

Number of movies

a)   How many people were surveyed ?

b)   How many people saw 3 movies ?

c)   How many people saw 2 movies or more ?

4) Evaluate the expression : $5x^2 + 8 \div (6-4) \div 2$ at $x = 3$

2ⁿᵈ Exam

Q1- Choose the correct answer :-

1) In the equation m = 3n + 4 , the dependent variable is ....
 a) m   b) 3   c) n   d) 4

2) The absolute value of the opposite of $|-1\frac{1}{2}|$ is ....
 a) $2\frac{1}{2}$ b) $1\frac{1}{2}$ c) $-1\frac{1}{2}$ d) 0

3) The smallest number from the following is ....
 a) 0.11   b) 0.2   c) 0.3   d) 0.101

4) The first operation you preform in the expression :10 ÷ 5 + (3−1)² is ......
 a) add   b) subtract   c) divide   d)exponent

5) y equals the product of x and 3 in equation is ....
 a) y=3x   b) x=3y   c) x=3+y   d) y=3+x

6) 10 less a number written as ....
 a) m − 10   b) 10 -m   c) 10 + m   d) 10 ÷ m

7) Which of the following is an integer ?
 a) $\frac{16}{5}$ b) $-\frac{15}{5}$ c) $-\frac{2}{4}$ d) 0.4

Q2- Complete the following :-

1) The independent variable in the equation 5L − 3 = m is ....

2) $10 - 3\frac{1}{4}$ = ...

3) If 5m = 0,then 100m = ...

4) The absolute values of the two opposites are ....

5) The coefficient of 2 + 3 a − 5 is ....

6) The distance between −3 and 0 on the number line equals ...... unit[s]

7) If the mean of 3 , 7 , 4 , 6 , x is 5 , then x = ...

8) From the opposite number line the integer
   for point A is .... and its opposite is ....

Q3- Choose the correct answer :-

1) The like terms in the expression : 1 + 5 a + 5 b + 2 are

a) 5a and 5b   b) 1 and 2   c) 5 and 5   d) 5 and 2

2) All the following expressions are equivalent except ....

a) $4x+8$ b) $2(2x+4)$ c) $4(x+4)$ d) $4(x+2)$

3) $|-1.34| <$ ....

a) -1.29 b) -1.4 c) 1.19 d) 1.4

4) Wael has x L.E., his father gave him 5 L.E., then he has ....

a) $x-5$ b) $x+5$ c) $5x$ d) $x \div 5$

5) A number is no more than 8 can be written as ....

a) $x \leq 8$ b) $x \geq 8$ c) $x < 8$ d) $x > 8$

6) Seven squared added to 5 equals ....

a) $7^2 + 5$ b) $2^7 + 5$ c) $2 \times 5 \times 7$ d) $7 + 2^5$

7) A merchant sold 12 same boxes of mango for 3,000 L.E., then the price of each box is .... L.E

a) 25   b) 250   c) 240   d) 230

Q4- Answer the following :-
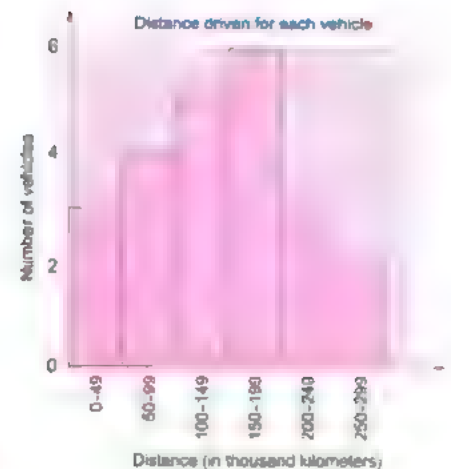
1) Using the following Venn diagram complete :

   a) The two numbers represented
     in the Venn diagram are ....

   b) The G.C.F of the two numbers is ....

   c) The L.C.M of the two numbers is ....

   d) Are the two numbers relatively prime numbers ?

2) From the opposite histogram answer the following questions :

Distance driven for each vehicle

   a) How many vehicles that covered a distance are there in interval (200 - 249) ?

   b) Which distance interval has minimum number of vehicles ?

   c) How many vehicles that covered a distance less than 200 thousand kilometers ?

   d) How many vehicles that covered a distance 100 thousand kilometers or more ?

3) Use the order of mathematical operations to simplify $40 + 5(3^2-7)+10$

----

4) Mira has 25 L.E. in her money box, she will save 20 L.E. daily .

   a) What algebraic expression represent this situation ?

----

   b) How much money in her money box after 3 days ?

----

   c) How much money in her money box after 6 days ?

Answers

1ˢᵀ Exam

Q1- Choose the correct answer :-

1) $5 + 12 = \text{..........} (5 + 12)$

   a) 1   b) 5   c) 60   d) 12

2) Number of solutions of inequality $x < -2$ is ....

   a) 1   b) -1   c) 0   **d) infinite**

3) The number of terms of the expression $5x + 3y$ is ....

   a) 1   b) 5   **c) 2**   d) 3

4) "q is six times p add to 12" in equation is ....

   a) q=6p-12   **b) q=6p+12**   c) p=6q-12   d) p=6q-12

5) All the following numbers are rational except ....

   a) 1   b) $\frac{2}{7}$ c) $\frac{4-4}{7}$ d) $\frac{8}{5-5}$

6) In the equation $y = 2x + 1$, the ordered pair $(2 , a)$ satisfies the equation , then $a = $ ....

   a) 5   b) $\frac{1}{2}$ c) 23   d) 6

7) The set of counting numbers .... the set of rational numbers.

   a) belong   b) not belong   **c) subset**   d) not subset

Q2- Complete the following :-

1) The smallest solution of the inequality $x > -1$ is **(0)**

2) $\left|-3\frac{1}{4}\right| + \left|1\frac{3}{4}\right| = $ **(2)**

3) The verbal form of k^2 is **(k times k)**

4) The L.C.M of 4 and 12 is **(12)**

5) The lower quartile for the set of data :23 ,21 ,17 ,18 ,20 and 19 is **(21)**

6) The range of the values 5 ,9 ,10 ,7 and 4 is **(6)**

7) The types of statistical questions are **(numerical)** & **(categorical)**

8) Hoda bought 15 pens for 180 L.E.then the price of each pen is **(12)** L.E.

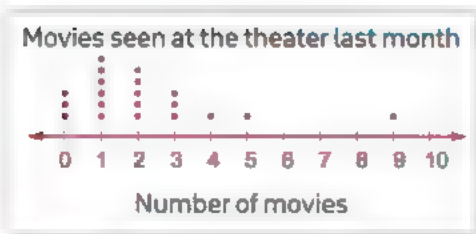## Q3- Choose the correct answer :-

1) Which of the following is equivalent to the expression $5x + 3 + x$?

   a) 5x+2   b) 8x+x   <u>c) 3(2x+1)</u>   d) 9x

2) If $\frac{x}{3} = 2$, then x = ...

   a) 2   b) 3   c) 1.5   <u>d) 6</u>

3) .... is lying between 2.14 and 2.2

   <u>a) 2.15</u>   b) 2.21   c) 2.22   d) 2.13

4) The number 2.21 belongs to ....

   a) counting   b) integers   <u>c) rational</u>   d) natural

5) Mohamed has 60 L.E. , his friend Ali has less money than Mohamed , then Ali may has ....

   <u>a) 53</u>   b) 61   c) 100   d) 60

6) The better measure of center for the following data set is

   ....

   a) mode   <u>b) median</u>   c) mean

7) In the opposite Venn diagram , the G.C.F is ....

   <u>a) 1</u>   b) 2   c) 5   d) 3

Q4- Answer the following :-

1) Order the given set of numbers from greatest to least

$$3.4 \quad , \quad -2\frac{1}{2} \quad , \quad 0 \quad , \quad -4\frac{3}{7} \quad , \quad 3\frac{1}{4}$$

$$3.4 \quad , \quad 3\frac{1}{4} \quad , \quad 0 \quad , \quad -2\frac{1}{2} \quad , \quad -4\frac{3}{7}$$

2) Ahmed saves 49 L.E. each week. After how many weeks he will save 12,005 L.E.

   (12,005 ÷ 49 = 245) – after 245 days

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3) From the opposite dot plot,

answer the following questions :-

Movies seen at the theater last month

Number of movies

a) How many people were surveyed ? (20)

B) How many people saw 3 movies ? (3)

b) How many people saw 2 movies or more ? (11)

4) Evaluate the expression : $5x^2 + 8 \div (6-4) \div 2$ at $x = 3$

$(5x^2 + 8 \div 2 \div 2)$

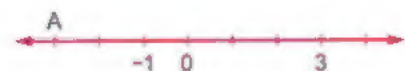$(45 + 8 \div 2 \div 2)$

$(45 + 4 \div 2)$

$45 + 2 = 47$

2ⁿᵈ Exam

Q1- Choose the correct answer :-

1) In the equation $m = 3n + 4$, the dependent variable is ....

   a) m   b) 3   c) n   d) 4

2) The absolute value of the opposite of $|-1\frac{1}{2}|$ is ....

   a) $2\frac{1}{2}$ b) $1\frac{1}{2}$ c) $-1\frac{1}{2}$ d) 0

3) The smallest number from the following is ....

   a) 0.11   b) 0.2   c) 0.3   d) 0.101

4) The first operation you preform in the expression : $10 \div 5 + (3-1)^2$ is

   a) add   b) subtract   c) divide   d) exponent

5) y equals the product of x and 3 in equation is ....

   a) y=3x   b) x=3y   c) x=3+y   d) y=3+x

6) 10 less a number written as ....

   a) m - 10   b) 10 - m   c) 10 + m   d) $10 \div m$

7) Which of the following is an integer ?

   a) $\frac{16}{5}$ b) $-\frac{15}{5}$ c) $-\frac{2}{4}$ d) 0.4

Q2- Complete the following :-

1) The independent variable in the equation $5L - 3 = m$ is (L)

2) $10 - 3\frac{1}{4} = (\frac{40}{4} - \frac{13}{4} = \frac{27}{4})$

3) If $5m = 0$, then $100m = (0)$

4) The absolute values of the two opposites are (equal)

5) The coefficient of $2 + 3a - 5$ is (3)

6) The distance between –3 and 0 on the number line equals (3) unit[s]

7) If the mean of 3 , 7 , 4 , 6 , x is 5 , then x = (5)

8) From the opposite number line the integer
   for point A is (–3) and its opposite is (3)

Q3- Choose the correct answer :-

1) The like terms in the expression : $1 + 5a + 5b + 2$ are

a) 5a and 5b   b) 1 and 2   c) 5 and 5   d) 5 and 2

2) All the following expressions are equivalent except ....

a) 4x+8   b) 2(2x+4)   c) 4(x+4)   d) 4(x+2)

3) $|-1.34| <$ ....

a) - 1.29   b) - 1.4   c) 1.19   d) 1.4

4) Wael has x L.E., his father gave him 5 L.E., then he has

....

a) x - 5   b) x + 5   c) 5x   d) x ÷ 5

5) A number is no more than 8 can be written as ....

a) $x \leq 8$ b) $x \geq 8$ c) $x < 8$ d) $x > 8$

6) Seven squared added to 5 equals ....

a) $7^2 + 5$ b) $2^7 + 5$ c) $2 \times 5 \times 7$ d) $7 + 2^5$

7) A merchant sold 12 same boxes of mango for 3,000 L.E., then the price of each box is .... L.E

a) 25   b) 250   c) 240   d) 230

Q4- Answer the following :-

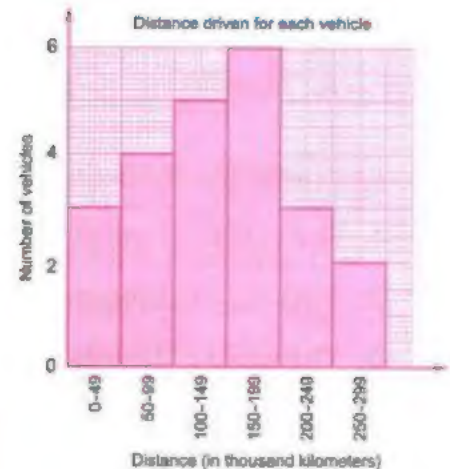**1)** Using the following Venn diagram complete :

b) The two numbers represented in the Venn diagram are **(25 & 6)**

b) The G.C.F of the two numbers is **(1)**

c) The L.C.M of the two numbers is **(150)**

d) Are the two numbers relatively prime numbers ? **yes**

2) From the opposite histogram answer the following questions :

Distance driven for each vehicle

a) How many vehicles that covered a distance are there in interval (200 - 249) ? **(3)**

b) Which distance interval has minimum number of vehicles ? **(250-299)**

c) How many vehicles that covered a distance less than 200 thousand kilometers ? **(18)**

d) How many vehicles that covered a distance 100 thousand kilometers or more ? **(16)**

3) Use the order of mathematical operations to simplify $40 + 5(3^2-7)+10$

40 + 5 (2) + 10

40 + 10 + 10 = 60

4) Mira has 25 L.E. in her money box, she will save 20 L.E. daily .

a) What algebraic expression represent this situation ?

(25 + 20)

b) How much money in her money box after 3 days ?

25 + (20 × 3) =95 L.E

c) How much money in her money box after 6 days ?

25 + (20 × 6) = 145 L.E

كيفية طباعة صفحات معينة من ملف معين
مثلا ازاى نطبع الصفحات من صفحة 4 الى صفحة 9

خطوة 1

خطوة 2
اختيار اسم الطابعة بتاعتك

خطوة 3
كتابة الصفحات المراد طباعتها
نكتب رقم 4 ثم نكتب الشرطة دي – ثم نكتب 9

خطوة 4
اختيار نوع الورق

خطوة 5
اختيار A4

خطوة 6